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Vol. XXXIX. No. 3.

MARCH 5th, 1938

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South Australia: George Wills & Co. Ltd., Gilbert House, Gilbert Place, Adelaide. Western Australia: F. H. Faulding & Co. Ltd., 313 Murray Street, Perth.

Letters to the Editor

POWER ALCOHOL FROM WASTE FRUIT.

(To the Editor of the "Fruit World and Market Grower.")

Sir,

"Common Sense" has tried to make out that power alcohol has only one use—that is, to replace petrol. This is, as far as I am concerned, not the real aim of my article. My aim is to commercialise the waste fruit, which I firmly believe can be done. Chemists in S. Australia are paying £2/14/- per gallon for alcohol to mix with their medicines and for general purposes. Apart from petrol there are thousands of pounds worth of alcohol used in the making of perfumery. My friend, a chemist, said to me, "From my point of view alcohol made from waste fruit and used alone for these two purposes (medicinal and perfumery) would make low grade or waste fruit just as valuable as first grade stuff."

My main reason for writing is that instead of the thousands of pounds paid to fruit officials, this money should go to a special department at the University for the sole purpose of discovering some means of manufacturing the waste fruit into a commercial product. The position is today we cannot sell in quantity good fruit—if the officials succeed in getting us to grow all first grade stuff what are we going to do with it?

In answer to the C.S.I.R. our contributor then deals with several recent advances in science, and concludes thus:—

My advice to all fruit growers in Australia is: Call a conference of all distillers throughout Australia, including Mr. Penfold Hyland, of Penfold's Wines Ltd., Magill, S.A., and put your case to them and then ask them for advice.—Yours etc.,

"STILL DOING MY BIT."

(The Editor Fruit World.)

Sir,

I question the Council for Scientific and Industrial Research as being modern.

At the beginning of 1917 the Rt. Hon. W. M. Hughes, P.C., M.P., Prime Minister of Australia, asked for a report of available sources of power alcohol. In 1918 the Executive Committee issued its report covering 69 pages, known as Bulletin No. 6, giving in imperial gallons power alcohol obtained per ton of 19 different cereals, vegetables, fruit, and bush scrub, Apples giving 12 gallons per ton of nearly 100 per cent. pure alcohol per ton.

Although over 20 years old, I recommend all interested in the welfare

of Australia and the fruit industry to study the report.

Much scientific research has taken place since then, due to the unprecedented increase of internal combustion engines.

War scared European countries with no flow of oil within their boundaries, who are spending still greater sums on petrol substitutes with a resultant increase of gallons per ton.

France produces 440,000,000 gallons of wine more than can be consumed or exported, this large quantity of wine is annually distilled into power alcohol. Grapes produce 18 gallons of 95 per cent. alcohol per ton. Apples produce 14 gallons of 95 per cent. alcohol per ton (J. G. McIntosh, Power Alcohol, 1923, Melb. Public Library).

In Victoria, almost on the doorstep of Melbourne eastern suburbs, thousands of tons of best quality Apples are produced annually.

In 1937 every week Apples were dumped as unsaleable when cool stores closed at the end of the year; thousands of cases of first quality fruit was dumped—a feeding ground for blackbirds, Codling Moth and other pests.

Only a few miles away in the congested southern suburbs are distilleries covering a large area, with, no doubt, all necessary plant. These distilleries to all outward appearances mostly idle.

Then again, if fruit or vegetables are not pulped with diluted sulphuric acid, there is the food value of the meal.

In Germany, where immense quantities of Potatoes are distilled into alcohol, the meal is eagerly sought after as cattle food.

On parts of New South Wales coast shark fishing is an interesting industry, the oil obtained by boiling down exported to United States as food for calves and pigs.

If the meal from Apples is impregnated with shark oil, not in sufficient quantity to cause self ignition, there would be a valuable fodder for dairy cows and pigs on our poorer dairy lands.

Faithfully yours,

A. J. FARRANCE.
Railway-road, Vermont.

RE POWER ALCOHOL FROM FRUIT.

In answer to an enquiry, the Council for Scientific and Industrial Research made available the following information:—

Yield of Alcohol, Etc.

The yields of alcohol obtainable from different fruits are approximately as follows:—

Apples, 12 gallons per ton.

Pears, 12 gallons per ton.

Apricots and Peaches, 11 gallons per ton.

Turning now to the costs of distilling, it is convenient, in the consideration of possibilities of alcohol production in Australia, to estimate (a) the actual manufacturing costs, excluding the cost of purchase of the fruit, and (b) the returns per gallon likely to be received from the alcohol produced: (b) minus (a) then gives the amount that can be paid for the raw material per gallon of alcohol obtainable from it.

The costs of distilling alcohol (cost (a) above) will vary according, among other things, to the size of the plant; thus, in a large scale plant capable of producing 5,000 gallons of alcohol per day, these costs would be of the order of 7d. per gallon, whereas, in a plant producing only 500 gallons of alcohol per day, they would be considerably more. Further, this estimate of 7d. per gallon is based on the plant working throughout the year. If it were only to work for, say, six months of the year, the cost per gallon would be increased by another 2d. or 3d.

Power Alcohol.

For the purpose of this discussion, it is not necessary to go into a lengthy

discussion of the prices that would be obtainable per gallon of power alcohol; suffice it to say that at present, in competition with petrol, it would not be safe to assume that for any large quantities more than 1/3 per gallon would be received by the distiller. Subtracting the above-mentioned 9d. per gallon manufacturing costs, we are left with 6d. per gallon content for the purchase of raw material, in other words, in the case of fruits, of the order of 6/- per ton delivered at the factory. It should be noted, however, that this price assumes a very large distillery in being. Actually, in the fruit producing districts, it is hardly likely that such a distillery would be erected to operate on a material that is only available for a few weeks of the year. In any smaller distillery, the cost of manufacture would be considerably more than 9d. per gallon, and the prices available for fruit correspondingly less. Further, there is the important consideration that the above-mentioned price of 9d. per gallon does not include anything for excise whatsoever, whereas petrol pays upwards of 7d. per gallon tax.

Accordingly, to sum up, it would seem that from the power alcohol point of view, the returns to the seller of waste fruit would not pay cartage, even if the fruit were available on the orchards for nothing at all.

POWER ALCOHOL.

Later:

A report has just been issued by Mr. L. J. Rogers, Commonwealth Fuel Adviser, in which he states that the production of power alcohol as a substitute for petrol is intrinsically uneconomic, owing to the fact that even from the most economically attractive source of power alcohol, molasses, the cost of delivery to the distributor is 1/9 per gallon, or 8d. more than the landed price of imported petrol. Under certain favorable conditions involving greater output, cost could be reduced to 1/4 per gallon.

(Letters continued on page 5)

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Large quantities in all leading varieties. Our trees this season are exceptionally sturdy and well shaped, without any blemish or marking. Early booking is advisable for later delivery. Large quantities of Peach stocks and Lemon stocks.

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ADVERTISING RATES ON
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A Monthly Newspaper published in the interests of the Berry Growers, Deciduous, Citrus, Dried and Canned Fruitgrowers, and Market Gardeners.

— by the —

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British Preferences on Fruit

VERY GREAT INTEREST centres around the forthcoming triangular trade conversations—Great Britain, the United States of America, and the British Dominions.

The Australian Canned Fruit Section is alive to the importance of the matters under review, and will have four direct representatives from Australia in attendance to act as advisers to the official delegation.

The Empire Fruits Council is to be commanded for the able statement drawn up and presented to the British authorities in support of the request that there be no reduction in the present duty of 4/6 per cwt, on Apples and Pears.

While there has been, in recent years, a reduction in the quantity of American Apples coming on to British markets, this has been more than offset by increased supplies from the Dominions and home orchards.

The following table gives the average imports of Apples from Empire and foreign sources for the four years previous to the operation of the duty, and for the four years 1933 to 1936 inclusive, together with the estimated average production of Apples (other than cider Apples) in England and Wales for the same period.

	1929	1933	(1,000 Cwts.)
	1932	1936	
Home Production	3,612	5,019	+1,407
Empire	3,300	4,754	+1,454
Foreign	3,605	1,802	-1,803
Net Increase	—	—	1,058

Home production may be estimated to increase in volume for some years to come, partly on account of the expansion of acreage since the war, a great deal of which has not yet come into full bearing, and partly on account of improved methods of cultivation in older orchards.

With regard to imports of Apples into the United Kingdom, a point which will no doubt be taken into consideration is that while the Dominions depend primarily on the U.K. market, the bulk of the U.S.A. Apples are absorbed in that country, and only the surplus is exported. In this connection it is pleasing to observe the success in the Apple advertising campaign in U.S.A.

It will be seen, however, that in the event of a reduction in the present duties being made applicable to countries other than the United States, the resultant increase in the imports of such fruits as Continental Apples and Pears, and S. American

Oranges and Grapes may create a most difficult problem for home and Dominion growers alike.

Since 1934 the export of Apples from Australia and New Zealand has been reflected through the Apple and Pear Council and the N.Z. Fruit Export Control Board, in an attempt to bring supplies into line with market requirements. The view is firmly held that the continuance of regulated supplies would be seriously jeopardised by any reduction in the present duty.

At the moment consideration is being given to the advisability of sending a direct representative from Australia to the London Conference in May, to act as an advisor and to forcibly represent the case for the Australian Apple grower to the authorities.

In the meantime it will be recalled that at the annual conference of the

STOP PRESS NEWS.

Tasmanian State Fruit Board.

Overwhelming Majority Favors Its Continuance.

Under Act of Parliament a vote was taken on February 28 in Tasmania as to the Continuance or otherwise of the State Fruit Board.

Details of the voting are not available as we go to press, but the will of Tasmanian growers has been expressed in an overwhelming majority in favor of the continuance of the Board.

Australian Apple and Pear Council then Assistant Minister for Commerce (Mr. Thorby) announced that in the revision of the Ottawa Agreements there would be better conditions for Australia than those now operating.

It is understood that the conditions in this connection have been disclosed to the leaders of the industry and generally approved.

The hope is expressed that when it comes to a final settlement, with mutual give and take in negotiating agreements, the fruit industry will find its proposals intact and embodied in the agreement.

All good wishes are extended to those who are going to represent Australia in these vital discussions. The national and international implications are of far-reaching importance.

PERSONAL

Mr. Harold Hanslow, of Tongala, has been appointed a member of the State Rivers and Water Supply Commission of Victoria. Mr. W. R. Robertson, who was Acting Commissioner, has had his appointment confirmed. Mr. P. J. O'Malley, Secretary to the Commission, who was Acting Commissioner until recently, is being appointed to a high administrative position.

Mr. E. C. Brickhill, the blind inventor of the Gay Sprinkler, has just returned from an extended visit to England and Palestine. The No. 3 Gay Rotary Sprinkler won the coveted award of merit of the Royal Horticultural Society of England against world competition. Mr. Brickhill was astonished at the development of citrus growing and agriculture in Palestine.

Two well-known citizens who recently received knighthoods were the Agent-General in London for S. Australia, and the Director of the Cawthron Institute, New Zealand. The former becomes Sir Charles McCann and the latter Sir Theodore Rigg.

Mr. E. Leishman, horticultural adviser for Mt. Lofty Ranges, S. Aust., has been appointed by the South Australian Government to visit Tasmania to study the crown pack for Apples.

At the recent by-election in Tasmania, Mr. St. Clair Bulman, of Freshwater Point, was elected to fill the place on the Tasmanian State Fruit Board caused by the resignation of Mr. L. S. Taylor.

TREWHELLA BROS. PTY. LTD.

The attention of readers is directed to the change in the address of the Brisbane agent for Messrs. Trewella Bros. Pty. Ltd., implement makers of Trentham, Victoria. The agent's address is now: Mr. Rex Robinson, 83 Gipps-street, Brisbane, Queensland.

Obituary

THE LATE MR. RODERICK SUTHERLAND.

Mr. Roderick Sutherland, refrigeration officer for the N.Z. Department of Agriculture, who died recently in New Zealand, was well known in refrigeration circles in Australia and N.Z. He was a foundation member of the Australian Institute of Refrigeration, and of the N.Z. Association of Refrigeration, and was a member of the executive committee of the latter body. Prior to coming to N.Z. as cool storage officer of the Department of Agriculture he already had a large experience in fruit storage, as chief engineer of the Orchardists' Cool Stores, Doncaster. He contributed freely to the proceedings of both those bodies, and was ever willing to help anyone who had a storage problem to solve. His views were freely quoted in the technical press, both of England and America. About twelve months ago he made a trip to England in charge of a special cargo of fruit from N.Z., involving a novel method of stowage, the results of which were entirely successful.

Mr. Sutherland, who was 55 years of age, was born in Australia. He leaves a widow in Wellington and two grown-up children residing in Australia.

A GREAT MAN PASSES.

Sir Truby King, the Friend of Children.

In the death of Sir Truby King, which occurred at Wellington, N.Z. on February 15 the world loses a great citizen. Sir Truby King was an authority on child welfare and has performed services of lasting volume to humanity. Through his researches Sir Truby King saved the lives of countless thousands of children and has won the heartfelt gratitude of parents.

Sir Truby King was born at New Plymouth, N.Z., eighty years ago. He was a banker before changing over to study medicine.

— THE — **BAVE-U**

Power Sprayer

— Keeps the Mixture in the barrel as even at the end as at the beginning of Spraying. —

Information with pleasure.

Russell & Co.
Box Hill, E.11
Victoria

They'll return handsome profits later on—all varieties, disease free trees including Apples, Peaches, Pears, Plums, Apricots, Nectarines, Cherries, etc. FREE: New season's catalogue mailed upon request.

C. J. GOODMAN
Picnic Point Nurseries, Bairnsdale, Victoria

**As Spraying is a Necessity
—then use the World's Best—**

NEPTUNE SPRAYS . . .

The better quality of NEPTUNE Sprays is always obvious by comparison with others. NEPTUNE Sprays conform to the highest standards, and they are consistently uniform in strength and quality. Successful orchardists recommend them. Try them yourself and prove that they're better!

NEPTUNE PREPARED RED SPRAYING OIL
(“A,” “C,” or Heavy Base)
NEPTUNE PALSON
(Prepared Pale Oil)
NEPTUNE CLARIFOL
(Winter White Oil)
NEPTUNE WHITE SPRAYING OIL (Summer Spray.)
NEPTUNE LIME SULPHUR SOLUTION
(Clear, amber-coloured, free from sludge)
GENUINE MACCLESFIELD BLUESTONE CHEMICAL SULPHUR
(23871)

BERGER'S ARSENATE
(Powder or Paste)
COLLOIDAL LEAD ARSENATE
ENGLISH BLUESTONE SNOW
GENUINE BLACK LEAF 40
NEPTUNE LIME
POWDERED SULPHUR
COPPER SPRAY
NEPTUNE SPRAY SPREADER



(INCORPORATED IN N.S.W.) ALL STATES.

NEPTUNE OIL CO. PTY. LTD.

LETTERS TO THE EDITOR.

(Continued from cover ii.)

APPLES IN U.K.

(The Editor, "The Fruit World.")

I think there's room for great improvement in the fruit growing industry. As regards myself; I'm trying to hand-thin the Jonathans, Romes, Five Crown and Yates, and removed all inferior Apples such as Black Spot, small, and late growth and grubby Apples. My aim is to grow only Fancy Grade Apples, and so when picking time comes I've only good fruit to pick. This has got to be done, and might as well be done first as last. If all growers were to do this, there would be no need for a factory for reject Apples, as there would be no reject Apples for the factory.

When I was in England in 1930 the cheapest Apple I could get was Tasmanian Sturmer, plain grade, 2½, 6d. lb., better grades 6d. to 8d. per lb. And my friends at home tell me they are still at that price. As the wages of the working class is 8/- per day, and they cannot afford to pay this price. If I could get a penny to penny farthing a lb. and exchange for my Fancy Grade Apples at the packing shed here I'd be satisfied.

Now doesn't this seem as if there's something wrong for the growers to get 1½d. lb. and people in England to pay 8d. per lb. If we could get the Apples to the public in England from about 4d. to 5d. per lb., which I believe can be done, and we would not be able to supply the market.

When in London in 1930 I was in Covent Garden Market several times and had conservations with the merchants, and they told me they knew some of our Apples were sold six or seven times before they reached the public. This way of distributing is the cause of our trouble, and not the packing or grading.

I landed in England early in July, and I could not find an American Apple. I was told they were out of season. I went through America in June and the best Apples in America were selling at from 10 to 15 cents. per lb., too dear to send to England.

As far as I understand, each country is allowed a certain time to send their Apples to England. I saw the first shipment of American Gravensteins arrive at Covent Garden Market about the middle of August. The next day they were selling on the barrows in London streets at 9d. lb., the sizes 2½ to 2½ inch. They were

NEWS IN BRIEF

The Currant crop around Renmark is of extra high quality this season. There is a decided swing to the cold potash dip for Sultanas, states our Murray Valley correspondent.

Irrigation and drainage problems are discussed in this issue under the heading "Mid-Murray Notes."

Sulphur is useful as a soil corrective; mixed with gypsum the combination will liberate phosphates and other plant foods, beside improving the mechanical condition of the soil.

Now is the time to plant cover crops. Tick Beans (legumes) are favored in Murray Valley, where ample irrigation water is available. Peas, Rape, Rye, Tares, and Barley can be grown on one irrigation, but non-leguminous crops need nitrates in the Spring in artificial form.

Californian canners have set aside £62,000 for publicity for their Peach pack this season.

By effective publicity methods, the consumption of Apples in U.S.A. this season is the heaviest in all history.

The Californian Cling Peach pack from the 1937 harvest was 12,237,250 cases (No. 2½ can basis). 282,000 tons of Peaches were delivered to canners and 40,000 tons were used for by-products—fruit cocktail, fruits for salad, pickled Peaches, Peach juice, etc.

The effectiveness of the Dried Fruits publicity campaign is seen in the fact that the 1937 Australian consumption was a record of around 20,000 tons, being 3,000 tons ahead of the previous record.

The advertising campaign conducted by the Victorian Central Citrus Association last season was very suc-

pale yellow with pink streak, nothing to be compared with our Gravenstein Apples.

Last year the Gravenstein and Jonathan came in together and glutted the Victoria Market, Melbourne. If we could have sent our Gravenstein out of the country we would have saved the market here.

Yours, etc.,

W. J. MOFFATT,

Blackburn, Vic., 24/1/38.

cessful. A special effort cleared accumulated stocks of Valencias. The demand was also effectively stimulated. An increased advertising campaign in 1938 is projected.

Speaking at a social at Renmark recently, Mr. C. A. S. Hawker, M.H.R., congratulated the dried fruits industry on absorbing the antagonistic element, which was a better way than resorting to legal manoeuvres.

It is proposed by the Melbourne Metropolitan Retail Fruiterers' Association to apply for an extension of Saturday half holiday, now applying only to the Winter months, to include the whole year. Retail fruiterers state the public quickly adjusted itself to the closing of shops on Saturday afternoons, and made their purchases on Friday evenings and Saturday mornings. There had been no loss of trade.

An overwhelming majority of fruitgrowers decided on February 28 for a continuance of the State Fruit Board.

A serious position has arisen in Harcourt owing to the lack of sufficient water for irrigation. The losses will be in the region of £100,000, and much unemployment will be created.

Four representatives from Australian fruit canning interests will attend the London conference when the Ottawa Agreements come up for review.

FRUIT AND NUTRITION

Marketing Report for Melbourne.

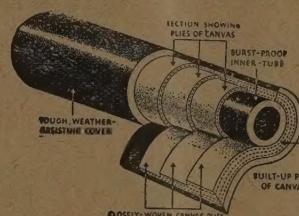
Five Months Study Completed.

ON behalf of the National Nutritional Council, set up by the Commonwealth Government some time ago and to include an investigation of all phases of fruit marketing as related to the value of fruit in the nutrition of the public menu, Mr. H. P. Brown, of the Melbourne University, has been making a careful study of the quantity of fruit and vegetables handled at the Victoria Market.

Mr. Brown has kindly made the following particulars available, as covering five months from September to January. He will continue the study for a full year and present his finding to the Nutritional Council when completed.

To study actual delivery conditions, it was found that country transports load up and are away before the opening hours of the markets, and that within open hours only from 1 to 5 per cent. of fruit and vegetables are taken by country transports. That the number of growers delivering to the market by their own conveyances is approximately 700.

In the week ending September 11, 32,154 cases of Apples were marketed; week ending October 16, 34,380 cases; November 13, 30,913; December 18, 28,407; January 15, 20,428. The details re vegetables show great variation in weekly deliveries.



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in Spraying than a good Hose.

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YOUR STORE.



ELEPHANT BRAND SPRAY

Use
"ELEPHANT" Brand
Arsenate of Lead—Quality Stands Alone.

We can supply all your Spray Requirements—ARSENATE OF LEAD (Paste or Powder), SPRAY SPREADER, SPECIAL COPPER MIXTURE, LIME SULPHURE, WHITE OIL, NICOTINE SULPHATE, RED OIL, Etc.

Extract from "BETTER FRUIT," March, 1937, by Dr. R. L. Webster, Entomologist, State College of Washington, Pullman: CODLIN MOTH COVER SPRAYS—"Ever since the imposition of an arsenic tolerance in 1926, and even before that time, investigators have been testing other materials which may be used in place of lead arsenate. Following all these intensive and extensive investigations lead arsenate appears to have certain inherent qualities which place this material foremost as an insecticide for codlin moth control."

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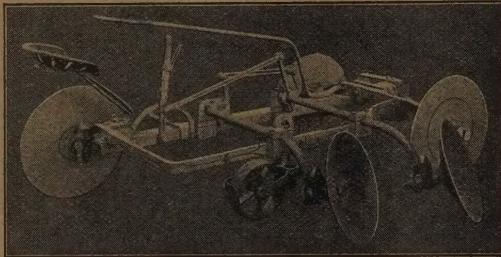
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Check the re-infestation of your trees with a scientific spray programme and Gargoyle RED Spraying Oil—the famous DORMANT oil spray. Gargoyle RED Spraying Oil (orders are now being booked for the winter spray programme) will enable you to exercise complete control over ALL pests that hibernate on your trees. Gargoyle RED Spraying Oil is unrivalled for Quality and Efficiency—and it's Made in Australia.



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Spraying for Insect Pest and Disease Control

Aphides and Their Control

GREEN PEACH APHIS — BLACK PEACH APHIS — BLACK CHERRY APHIS — WOOLLY APHIS — PEAR ROOT APHIS — VEGETABLE AND FLOWER APHIDES.

By J. W. Evans, Entomologist, Tasmanian Department of Agriculture.

Aphides, "Plant Lice," or "Green Fly," and possibly the best known insect pests with which those who grow plants have to contend. Although small soft-bodied insects which are easily destroyed by insecticides, their amazing powers of reproduction render them difficult to control. There are no indigenous aphides in Tasmania, and it is not known how many species have been introduced into and established in this State. The life-history of many species is complicated, and in the present article only such facts are given as are necessary for an understanding of control measures.

Aphides are sucking insects, hence cannot be killed by stomach poisons such as lead arsenate. They have many natural enemies which exert a considerable degree of control; amongst these are ladybird beetles, lacewings, the maggots of hover flies, and parasitic wasps.

Green Peach Aphid (*Myzus persicae*).

The Green Peach Aphid occurs on Peach trees during the Spring and early Summer months, frequently in such numbers as to cause the leaves to curl, and to retard the development of the twigs and fruit. During the Winter months small shining black aphis eggs may be found on the twigs, clustered principally around the axils of the buds. These hatch either in late Winter or early Spring, and give rise to wingless females, which are known as "stem mothers," and which produce living young without previous fertilisation. The subsequent generation develops wings and some of the insects fly off and infest other plants, such as Potatoes, garden flowers and weeds. On these secondary host plants, several generations are produced of both winged and wingless females, until in the Autumn, in addition to females, male insects appear. Late in the season some of the females fly to Peach trees, are fertilised by males and lay eggs, these overwintering eggs are the only ones laid during the whole year.

Most efficient control of this pest is secured if the trees are sprayed early in July, when they are completely dormant, with tar distillate emulsion at a strength of 1:35 or 1:40. Miscible red oil, at a strength of 1:20 is also recommended.

The purpose of these sprays is to destroy the overwintering eggs. If Winter treatment has not been carried out a watch should be kept early in the Spring for aphides on the opening buds and leaves, and as soon as they are noticed the trees should be sprayed with nicotine sulphate and white oil, or any contact insecticide. Once the aphides have become so numerous as to cause the leaves to curl, control is well-nigh impossible.

Black Peach Aphid (*Anuraphis persicae-niger*).

This aphis is seldom such a serious pest of Peach trees as the Green Peach Aphid, and is controlled by the same measures as are recommended for the latter. In addition to attacking the leaves it feeds on the roots of Peach trees, and in mild Winters will reproduce during the whole season.

Black Cherry Aphid (*Myzus cerasi*).

The Black Cherry Aphid passes the Winter in the egg stage on Cherry

trees and frequently causes them serious injury during the early Summer months. Control measures are the same as for Green Peach Aphid.

Woolly Aphid (*Eriosoma lanigerum*). It is probable that the Woolly Aphid occurs in every Apple orchard in Tasmania, and the large galls that occur on old trees testify to its having been at one time a pest of major importance.

Since the introduction and establishment of the parasite *Aphelinus mali*, little injury is now caused to Apple trees, although in occasional seasons the activities of the parasite lag behind those of its host. If any uncertainty exists as to the presence of *A. mali* in an orchard, a search should be made for parasitised aphides. These have lost their waxy covering and are black in color, and after the emergence of the parasites have round holes in the empty skins. In cases where additional control measures are needed, trees may be sprayed during August with miscible red oil, at a strength of 1:20. The oil should be applied at a high pressure.

Pear Root Aphid (*Eriosoma lanuginosa*).

The Pear Root Aphid passes the Winter in the egg stage on Elm trees. The eggs hatch in the Spring and the feeding of the Aphides on the leaves causes the formation of large reddish galls, known as "cockscomb galls," inside which the insects feed. In midsummer they migrate to Pear roots, where they feed until the Autumn. Well established Pear trees suffer little injury, but a heavy infestation on young trees may result in the death of the trees.

This pest has not yet been recorded on Pear trees in Tasmania, but the cockscomb gall occurs on Elm trees in Hobart parks and gardens.

Vegetable and Flower Aphides.

The aphides mentioned in the previous paragraphs are principally pests of trees. There are others that cause serious injury to market and cereal crops, and to plants grown for ornamental purposes. Amongst them the following are of importance in Tasmania: The Cabbage Aphid (*Brevicoryne brassicae*), the Carrot and Parsnip Aphides (*Cavaricella aegopodii* and *C. capreae*), the Rose Aphid (*Macrosiphum rosae*) and an unidentified species that damages Oat crops. None of these can be controlled by sprays directed against the egg-stage, but all are readily killed by contact sprays or dusts, of which those containing nicotine sulphate are most generally used. All aphides reproduce rapidly, hence for control to be successful, applications of insecticides must be made early in the season and at frequent intervals. Dusting is recommended rather than spraying, because of the ease and rapidity with which dusts can be applied. When sprays are used soap or some other wetting preparation should be incorporated in the mixture.—"Tasmanian Journal of Agriculture."

Shot Hole (*Coryneum Beijerinckii*): Spray with Bordeaux 6-4-40 before leaves fall in the Autumn (and 6-4-40 at "pink" stage). Use lime casein spreader with Bordeaux.

Autumn Spraying in the Orchard

Attend also to Draining, Cover Crops, Ploughing and Manuring.

Experiences in New Zealand.

THE SPRAYING of stone fruit trees in the Autumn is recommended by Mr. B. G. Goodwin, Orchard Instructor, Department of Agriculture, Christchurch, N.Z. in his cultural note for growers in the Department's journal.

The time for spraying, states Mr. Goodwin, is when the leaves commence to show Autumn tints and to fall—with Bordeaux 5:4:50. For the better control of Brown Rot, Leaf Curl, Die Back, etc., stone fruit trees should be examined carefully and all cankered and infested shoots, laterals, branches and mummified fruits removed and destroyed by burning, for in such tree-parts the fungous diseases over Winter.

Drainage.

Good drainage is very important. The drainage of heavy retentive soils should not be neglected. Tile drains, though more expensive, give the best results, and are the most convenient and permanent type of drain for the orchard. Existing open drains should be cleaned and put in order so as to enable the drainage water to pass away freely.

Ploughing and Manuring.

The orchard should be ploughed as early as possible after the fruit crop is harvested, so that the work may be completed before it is too wet for working.

In circumstances where a green crop has been sown and has not reached a sufficient height, it is as well to delay the ploughing for a while, to obtain the benefit of any additional

CODLING MOTH ERADICATION.

That the practical elimination of the Codling Moth was possible even in a hot district such as the Murrumbidgee Irrigation Area was stated by a well-known grower before the Fruit Industry Enquiry Commission at Griffith, N.S.W.

Mr. P. C. Cox gave details of his spraying methods which were supplemented by tree bandaging and a thorough Winter clean up.

growth the crop may make during late Autumn and early Winter. The soil is greatly benefited by being exposed to the Winter frosts and rain. To facilitate the surface drainage the land should be ploughed with the fall, and not across the slopes. Plough to the trees, leaving an open furrow along the centre of the land between the rows of trees.

It is recommended that deep-ploughing should be done, towards the centre of the rows, in Autumn, as the effect of any injury to the feeding roots at this time of the year would be less than when the trees are in growth. When ploughing close to the trees, shallow ploughing is advisable, as otherwise serious damage to the root system may occur, which would result in a considerable check to the growth of the trees.

Applications of phosphatic and potassic manures may be made during the Autumn just prior to the ploughing of the land. Soils requiring lime may be top-dressed with approximately 1 ton of carbonate of lime per acre. The application of the quickly acting nitrogenous fertiliser may now be delayed until the Spring.

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LEAD ARSENATE LIME SULPHUR SOLUTION

RESULTS OF ANALYSES:

See Department of Agriculture Journal, November, 1937, pages 554 to 557, for results of official analyses, or January issue of the "Fruit World."

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THE GRAPE VINE MOTH

Method of Control

The caterpillar of the Grape Vine Moth (*Phalaenoides glycine*) is the most common pest of the Grape Vine, and if allowed to remain unchecked, may seriously damage the young bunches and defoliate the vines.

The Winter is passed in the ground in the pupal stage, and the moths, which measure about 2½ inches across the outspread wings, are black with yellow markings, emerge in the Spring about the time the vines come into leaf. The eggs, which are deposited by the female on the stems and leaves, are somewhat flattened and finely ridged. There are six larval stages, the mature caterpillar, which is about 2 inches in length, being greenish-yellow marked with numerous short transverse and irregular black lines.

Several generations of this pest occur during the Summer months, particularly heavy infestations occur-

ing at times during February and March. Thorough spraying of the vines with arsenate of lead, using 1 lb. of arsenate of lead powder in 40 gallons of water, will control this pest. The spraying should be carried out in the Spring, when the larvae first appear on the vines, and repeated if the caterpillars again become abundant later in the season.

In vineyards it is customary to combine this arsenate of lead spray with one of the fungicidal sprays.

FRUIT INDUSTRY COMMISSION.

The N.S.W. Executive Council has extended to May 24 the Royal Commission issued to Mr. J. E. McCulloch, S.M., to inquire into the fruitgrowing industry.

SERVING FRESH FRUIT.

A pleasant and economical way of using fresh ripe fruit. Take the required quantity of nice ripe fruit—Peaches, Pears, Plums, Apricots, Nectarines, Oranges, etc., are all delicious when served this way.

Slice the fruit, place a layer in a salad bowl, sprinkle with sugar, add another layer of fruit etc., until bowl is full. If Apples are to be used, grate on a coarse grater and add a squeeze of Lemon; nice ripe eating Apples, especially O.S. Jons., are best. Serve with cream or ice cream.

This is very economical, as less sugar and fruit are required and no fuel, and you can have a nice cool dish at a moment's notice, beside full vitamin content.

[The foregoing comes from Mrs. R. A. Cramond, of Basket Range, S. Aust. Other hints of a similar character from readers would be welcomed.—Ed., "F.W. & M.G."]

Victorian Spraying Hints

Autumn spraying recommendations by Mr. S. Fish, M.A.Sc., Victorian Government Biologist, include the following:

Brown Rot: Spray with Dry Mix Lime Sulphur, 25 lbs. to 100 gallons water at petal fall.

Olive or Black Scale: This pest attacks Citrus, Apple, Apricot, Vine, Olive, Pear and Plum trees, also garden shrubs: Spray between November and March with White Oils. When young scale are moving is the favored time for their destruction.

The Olive or Black Scale is very destructive, causing a sooty fungus to develop on the leaves, making trees sickly. The scales are light brown when young with an H-like marking on back of scale.

Powdery Mildew: This serious disease attacks leaves, shoots, blossom buds and fruits of Apples and Pears. Leaves and buds become covered with glistening white masses: fruit is disfigured and small. Use precipitated sulphur 10-100 at petal fall.

[The full hints—as contained in the "Fruit World Annual"—are: In Winter prune off the buds and infected shoots. Spray with lime-sulphur, 1-30, between open cluster and pink stage; precipitated sulphur, 10-100, at petal fall, and again (with last-mentioned spray), early in January. If disease is troublesome, spray till middle February.]

Control of White Wax Scale

Spraying of Citrus Trees.

Where control measures have not been undertaken against white wax scale, the majority of the scales may by now have passed the young "peak" stage, as the emergence of young of the white wax scales was earlier this season, states the N.S.W. Department of Agriculture. If the scales are still in the "peak" stage they may be controlled with a soda spray used at the rate of:—

(1) Fresh washing soda	8 lb.
Water	40 gallons
or	
(2) Soda ash	3 lb.
Water	40 gallons

The amount of soda required is dependent upon the stage of development of the wax scales, and where they are well developed and thickly covered with wax it will be necessary to use up to 15 lb. of fresh washing soda or 5½ lb. of soda ash to every 40 gallons of spray. This amount, however, should not be exceeded.

If Red Scale is also present, a white oil emulsion may be added to the soda spray at the rate of 1 gallon of oil to 40 gallons of spray.

Where white oil is not being used, a spreader, such as soap or oil, should be added to the soda spray. For this purpose red oil at the rate of ½ gallon, or soft soap 2 lb., should be added to 40 gallons of the soda solution.

Bay View... Fruit Picking Bag

REDUCES YOUR PICKING COSTS

Mr. Val Kerr, one of Victoria's leading orchardists, writes:—

"I have been using Bay View Bags for eight years, and find that they expedite considerably the work of picking. They are comfortable to wear, and the fruit is handled with a minimum of bruising."

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Packed in 44 gall., 5 gall., 2 gall., and 1 gall. drums,
and Cases — 2 x four gal. tins.

Obtainable from all Packing Sheds, Associations, etc.

VICTORIA

The Goulburn Valley

(By Our Correspondent.)

New Pear Peeling Machine — Canning Peaches — Oriental Peach Moth.

THE fruit season in the Goulburn Valley—Shepparton, Ardmona, Merrigum and Kyabram, etc.—was fully two weeks earlier than usual.

The first picking of Mayflower Peaches was made on November 15, 1937, and early Apricots a few days later. Right throughout the Goulburn Valley there was a good crop of canning Apricots of splendid quality. The canners started operations on December 15, and with heavy supplies of Apricots, were able to put up a large pack of choice quality fruit. The varieties most in demand are Trevatt, Blenheim and Tilton, on account of the bright yellow condition in which they are delivered to the factories.

The good old Moorpark is gradually going out of favor; on account of the unevenness in which it ripens.

W.B.C. Pears.

The season opened with a bumper crop of Williams Pears, clean and free from Black Spot.

Unfortunately a terrific dust storm which swept the district on New Years night caused a loss of 25 per cent. of the crop. The ground was literally strewn with green, immature Pears.

This severe loss, coupled with a heavy infestation of Codling Moth during the second week in January, further reduced the crop, so that most canneries were considerably short in their tonnage contracted for.

The canners had an extremely busy time putting up the large pack of Pears, and were greatly assisted in their work by the introduction of Pear peeling machines recently imported from America. One of these machines in the hands of a skilful operator is capable of doing 116 kero boxes of Pears in a day, thus enabling larger quantities of Pears to be processed in a shorter period, saving time and loss.

Canning Peaches.

Growers are at present harvesting an excellent crop of mid-season canning Peaches. The earlier varieties of yellow centred Peaches, such as Levis, Peake, Palora and Sims Cling are already finished, and in the cans. Then follow Phillips Cling, Goodman Choice, and Golden Queen; all these varieties are much sought after by canners, on account of the clear lemon color, texture and flavor of the fruit, and are in great demand for the export trade.

There is a particularly heavy crop of Pullars Cling Peaches this season, and it is a wonderful sight to drive through the district and see the heavily laden trees supported with thousands of props to enable the trees to carry the heavy weight of fruit, which will be ready for harvesting fully ten days earlier than other years.

Pullars Cling and Thiele Cling are consistent bearers of large size fruits, and for years have been the mainstay of canning Peach growers of the Goulburn Valley.

The season has been particularly dry and hot, and much larger quantities of water have been used for irrigation than usual, but there has been plenty of water for all.

Export Pears.

There is a splendid crop of high quality export Pears in the Valley this season, including Packhams, Josephines, Winter Nelis and Beurre Bosc. The packing sheds and cool store of S. J. Perry & Co. present a busy scene just now in grading and packing the fruit for shipment overseas. Some of the finest quality Pears in the world are grown in the Shepparton and Ardmona districts.

Transports.

Transports are now playing an important part in the fruit industry. An efficient service is operating. They call at the orchards with their trucks and load up the fruit in the cool of the evening. The fresh fruits are delivered to the Melbourne markets, and the canning fruits to the Metropolitan factories early the following morning.

Another fleet of trucks pick up the Sydney fruit in the same manner and load it in trucks at Albury the following morning. This has been a great asset to growers, the fruit reaching Sydney in much better condition than in the old days. Unfortunately, the transport men are considerably harassed in their work by harsh laws and regulations of the Transport Board.

Oriental Peach Moth.

It is particularly gratifying to Peach growers to find that the Oriental Peach Moth is not so prevalent this year as it has been during the last five years; when 30 to 40 per cent. of the crop was destroyed through stings from this dreaded pest.

The Commonwealth Council for Scientific and Industrial Research has its laboratories and officers at Mooroopna, where very important experimental work is being carried out, both in the laboratories and the orchards. Last Winter, Mr. G. Hellson, who is in charge at Mooroopna, and who is doing very good work, was sent to U.S.A. by the Commonwealth Government to make a further study of the moth. He returned home last November, having gathered much valuable information. He also collected a consignment of 27,000 parasites to combat the moth. These were successfully hatched out in the laboratory, were liberated in the orchards, and have again reproduced themselves there. So the position at present looks rather hopeful.

Handling Pears.

Much concern has been expressed locally because of reports from London of Pears opening up in a badly bruised condition. It is thought that much of the trouble is in the orchard, consequently growers are being instructed in relation to the most careful handling methods possible in order to avoid bruising.

Pear Peeling Machines.

The eighteen Pear peeling machines at the Shepparton Cannery save labor and ensure a bigger output. The machines operate in three lines of 6 each.

Pear peeling machines are also operating at the Ardmona and Kyabram factories.

COOPER SPRAYS.

Owing to a typographical error in the advertisement of Messrs. Wm. Cooper and Nephews (Australia) Pty. Ltd., Sydney, manufacturers of Cooper's Standardised Horticultural Remedies, in the 1938 edition of the "Fruit World Annual," the name of their Victorian distributor was spelt incorrectly. This should have read "Ramsay and Treganowan Ltd., 469-477 Latrobe-street, Melbourne."

This advertisement, which appeared on page 2 of the 1938 edition of the "Fruit World Annual," contained details of Cooper sprays, including the following:

Arsinette (specially prepared arsenate of lead powder), Albouleum (emulsified white oil), Bordinette (ready prepared Copper Fungicide), Colloidal Sulphur (pure sulphur in semi-paste form), Drymac Derris Dust, Ovicide (tar distillate wash).

Other lines advertised included: Katakillia, Nicotine, Weedicide, Apertite, Wormkiller, Soil Steriliser, etc.

HARCOURT YOUNG
ORCHARDISTS' CLUB.

Much useful information has been disseminated. Office bearers are:—President, W. Eagle, Jr.; Secretary, F. L. Bertuch; Treasurer, T. C. Warren; Committee, Messrs. E. Richards and R. Hankinson.

CODLING MOTH CONTROL.

C.S.I.R. is Seeking Effective Non-Arsenical Spray.

In the annual report of the Council for Scientific and Industrial Research the following is stated:—

"The Committee constituted for research into Codling Moth, consisting of entomological and horticultural officers of the State Departments of Agriculture and the C.S.I.R. appointed a chemist to study insecticidal problems.

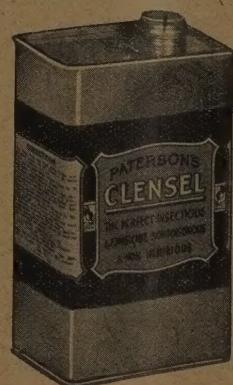
"Because of the objections raised by health authorities re arsenical residue, some other toxic substance is required to replace it in Codling Moth spray schedules. One of the most promising insecticides, phenothiazine, however, becomes oxidised on exposure, and leaves a black film over the fruit. Experiments are in progress with the object of preparing phenothiazine derivatives which will not oxidise on exposure. Various preparations of Australian and imported bentonitic clays, combined with brown coal, and nicotine, are also being studied for spraying materials."

PATERSON'S CLENSEL

Insecticide and Fungicide

has no equal in combating Aphid, Scale, Black and Red Spider, Harlequin Bug, Fungous Diseases, and a whole host of Garden and Orchard Pests.

PRICES:	1/2 Pints	1/1
Pints	1/9	
Quarts	3/-	
1/2 Gallon	5/9	
1 Gallon	10/3	
4 Gallons	32/6	
10 Gallons	65/-	



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Obtainable from all Dealers in Orchard, Nursery and Garden Supplies

"The best is always the cheapest in the long run."

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GERRARD WIRE TYING MACHINES CO. PTY. LTD.

THE CITRUS INDUSTRY

Victorian Central Citrus Association

REPORT OF SEVENTEENTH ANNUAL CONFERENCE.

Proposals for Reorganisation Not Accepted by Annual Conference — Trade with New Zealand — Success with Publicity Campaign — Saturday Afternoon Closing of Fruit Shops.

THE seventeenth annual meeting of the Victorian Central Citrus Association was held at Temple Court, Melbourne, on February 8 and 9, 1938.

The Chairman of Directors, Capt. D. J. Halhed, presided. There were in attendance delegates as follows:— Messrs. H. O. Symons (Merbein), H. Wormwell (Mildura), R. D. Hollins (Red Cliffs), E. Keenan (Coomealla), D. J. Walters (Murrabit), R. Cobbett (Bamawin), R. J. Watson (Pericoota, N.S.W.), A. H. Smith (Wangaratta), J. Logan (Nanneela), P. Rossiter (Ngawee), S. P. Taylor (Curlwaa, N.S.W.); A. E. Cameron (Red Cliffs); Messrs. A. W. Schwennesen (general manager), G. E. Kitchen Kerr (marketing manager), E. J. Eagle (Barham, N.S.W.), C. H. Cameron, J. M. Ward (Superintendent of Horticulture), J. A. Parkes, Lindner, L. Cox, E. W. Thompson, (Retail Fruiterers' Association).

In his annual report, Capt. Halhed said the position of the Association had improved during the year, and, apart from one or two difficult periods on the Melbourne market, the marketing of citrus had been conducted in an orderly manner. The system of control and supervision of the market had yielded results equally satisfactory with those of other years. Publicity methods had been extended, and now 20 per cent. of the levy was being spent in that direction. Good advertising, however, would not materially benefit poor fruit, or fruit which was poorly packed and graded. A considerable quantity of poor fruit, however, was reaching the Melbourne market, and he appealed to all concerned to submit the best possible pack.

Continuing, the Chairman thanked the Government for providing telephone facilities for orchard supervisors. Provided the New Zealand market were open, an agreement was possible between the Australian States supplying N.Z. He thanked the districts for their support in the handling

of Victorian consignments to N.Z. The Department of Agriculture had rendered good service in investigating Red Scale, and the C.S.I.R. proposed to appoint a plant physiologist to V.C.C.A. Directors proposed to assist by a subsidy of £100 per annum.

Reorganisation Proposals.

Mr. H. O. Symons (Mildura) moved in favor of the appointment of at least two additional Melbourne agents.

Mr. D. J. Walters (Murrabit) submitted an amendment to basically alter the system of organisation by creating area and district councils and abolishing the limitation of agents.

Elaborating his proposals, Mr. Walters advocated dividing the State into three or at most, four areas—(1) Mildura and district; (2) Nyah to Barham; (3) Echuca to Cobram, Wangaratta and Goulburn Valley or 3 or 4. These areas to be divided into two according to most economical method. Areas to be based on a minimum production of 200,000 cases. Districts to be sub-divided with packing sheds, or if without packing sheds, of not less than 10,000 case production. This would decentralise control, and provide for efficient contacts and dissemination of information. Finance to be secured by a levy of 2d. or 1½d. per case on all citrus marketed in Melbourne or exported and 1d. on citrus marketed through country centres or privately.

Continuing, Mr. Walters said it was only through having Mildura and S. Australian fruit that the present agents could be held. As so much fruit was sold by agents other than those appointed by the V.C.C.A. it was wrong to say that the Association controlled prices. For certain classes of citrus outside agents often obtained higher prices. The only way was to permit every agent of good standing who was willing to conform to certain things to handle the fruit.

Mr. E. J. Eagle supported Mr. Walters.

The Chairman said that although he strongly opposed the reorganisa-

tion proposals he recognised that Mr. Walters had the good of the industry at heart. It would be a mistake to give all agents an "open go." Unless the V.C.C.A. retained its present control their only service would be to report on the market in much the same way as the representative of the N.S.W. Fruitgrowers' Federation did in Sydney.

There was a spirited debate throughout the first afternoon and the following morning. Mr. Kerr vigorously opposed the amendment. He admitted there were certain anomalies under the present system, but evolution was certainly better than making a sweeping change, the weakness at the present time was the lack of uniformity in the packs. There was no effective comparison between Australian and Californian citrus growing. In California their Citrus Exchange at Los Angeles operated successfully but their Oranges were produced in an area of approximately 100 miles by 50 miles.

Mr. A. E. Cameron (Red Cliffs) suggested a compromise by which Murrabit growers could send their fruit to any agents they wished provided they continued to support the V.C.C.A. with their levies.

Mr. Cobbett said that it would be madness to cause a break in the Association. He suggested the withdrawal of both motion and amendment and the convening of a conference with the corresponding organisations in N.S.W. and S. Aust. to consider alterations in the constitution if necessary.

Mr. Logan queried the possibility of a compromise when Mr. Walters had laid down a condition from which he would not diverge, viz., the throwing open of the market to all agents of good standing.

Mr. Walters stated that dissatisfaction among growers regarding the present marketing system was extending. His plan was a logical one, and if adopted would build up the organisation.

All districts except Murrabit voted against the amendment, and the Mildura motion was carried.

Selling on Merit.

Claiming that some smaller districts were not treated fairly in the marketing of fruit, Mr. J. Logan (Nanneela) moved:—

"That this conference recognises that good quality citrus is being produced in all districts affiliated with the V.C.C.A., and that every effort should be made to sell such fruit on

its merits and without prejudice."

The motion was agreed to.

Market Manager's Report.

The market representative presented his report, which was adopted (see report in another column).

Fruit Shop Hours.

Mr. E. W. Thompson, Secretary, Melbourne and Metropolitan Retail Fruiterers' Association, stated that the closing of retail fruit shops on Saturday afternoons in Winter had not resulted in any loss of trade. The public quickly adjusted themselves, and purchases were now made on Friday evenings and Saturday mornings.

It was now proposed that the Saturday half-holiday be extended throughout the year.

In answer to a question, Mr. Thompson said it was illegal for Oranges, or any fruit, to be sold at football matches.

Mr. Thompson was thanked for his attendance.

Publicity Campaign.

Mr. Kerr submitted report of the publicity campaign which had been conducted on an allocation of £500. The programme included radio and press advertising, distribution of posters and recipe books, co-operation with Health Week, with special emphasis on press propaganda. The consumption of citrus fruit had been stimulated. At one stage a special effort was made to clear a carryover of Valencias, and this was completed in two weeks, effecting a saving of £2,500.

The report was adopted and the conference approved of the proposal for an extension of the publicity programme under which all suppliers of citrus to the Melbourne market would be asked to make a contribution of 2d. per case to meet the cost. The other States are to be approached with a view to the extension of this work throughout the Commonwealth.

New Zealand Trade.

It was decided to recommend that an agreement should be entered into with the other exporting States, should any alteration be made in the conditions governing the entry of citrus fruits into the New Zealand market. This matter was referred to the Australian Citrus Advisory Council.

It was also recommended that only first-class quality fruit should be sent to New Zealand, and that the same careful handling should be given the fruit as to that despatched to the United Kingdom.

Red Scale.

The seriousness of the Red Scale problem was recognised. It was noted that Oranges washed to get rid of the scale did not keep well. Control of these pests should be on the groves and more power, it was stated, should be given to Departmental officers in regard to compulsory fumigation or spraying.

ORANGES FOR N.Z.

The Trade Agreement between Australia and New Zealand provides for freer and larger entry of Australian Oranges to the Dominion.

Owing to changes in the system of marketing fruit in N.Z., there is uncertainty as yet as to whether the business will go through the previous trade channels.

Oranges will be accepted in N.Z. from S. Australia, Victoria, and portions of N.S.W.

In order to arrive at the most equitable manner for forwarding Oranges from these States, the Victorian Central Citrus Association, at its recent conference, decided to refer this matter to the Australian Citrus Advisory Committee.

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Marketing Citrus Fruits

The Melbourne Market, April - December, 1937

BIGGER VICTORIAN AND SOUTH AUSTRALIAN CROP.
EXPORT PACKING DISLOCATES MELBOURNE SUPPLIES.

Increase in Scale-Affected Fruit.

Advertising Campaign Successful.

THE report of the Melbourne Market Manager for the Federal Citrus Council, Mr. G. E. K. Kerr, for the nine months ended December 31, 1937, presented at the annual conference of the Victorian Central Citrus Association on February 9, 1938, is as follows:

Increased quantities of Victorian and South Australian citrus fruits were marketed in Melbourne in the 9-months period ending December, 1937. On the other hand, the quantity received from N.S.W. was only half the 1936 total.

The crop forecast was influenced largely by the position in N.S.W., particularly on the coastal areas, where approximately 40 per cent. of Australian citrus fruits are grown. The Navel Orange crop in the aggregate was expected to be lighter, and Valencias to be heavier. The figures covering the crop movements in Victoria and border, and the S. Australian districts shows that the majority of these areas had increases both in Navel and Valencias, which were reflected in the heavier arrivals to the Melbourne market.

Fluctuations in Interstate Arrivals.

The diversion of the bulk of the M.I.A. pack to the Sydney market was responsible for a reduction in the aggregate supplies from N.S.W. by 68,000 bushels, but S.A. arrivals increased by 60,000 bushels and Victorian and border by 42,000 bushels. In the Victorian and border areas, the Mildura group sent an additional 40,000 bushels to Melbourne, of which approximately 15,000 cases were Grapefruit and Mandarins.

The net market arrivals, after deducting factory supplies, direct deliveries, interstate shipments and export from the gross arrivals, amounted to 758,000 bushels, compared with 724,000 for the 9 months ended December 31, 1936. The totals by States last year compare with preceding years as follow:

	(April-December)			
1937.	1936.	1935.	1934.	
Victoria and border	510,000	469,000	477,000	514,000
South Australia	175,000	115,000	120,000	150,500
New South Wales and Queensland	73,000	142,000	80,000	79,000
Bushels	758,000	726,000	677,000	743,500
Association total (bush.)	400,500	348,700	364,500	408,600
Association percentage	52.7	48	53.8	55

Association Control Effective.

When the Association percentages are being considered it should be remembered that the affiliated organisations, through the Federal Council marketing system, have undertaken a task that has not been attempted on behalf of an industry in similar circumstances. Citrus production is spread over a number of widely scattered districts and many areas are not susceptible to organisation in any form, owing chiefly to the comparatively small holdings, mixed plantings, and other producing interests of the growers concerned. If the production of these areas were omitted from the market survey, and the quantities of purchased fruit, chiefly from N.S.W., also deducted, the percentage of Association control would appear quite impressive for a voluntary organisation. Despite the big quantities not under the direct supervision of the Association, the wide publicity given to the Association's prices for the various grades and marks ensures a very full measure of price co-ordination over the whole market.

Active support of the Association's marketing policy is strongest in the districts where there is a substantial production of uniformly graded fruit, ranging from 70 to more than 80 per cent., and weakest in the other areas, where the support may fall below 20 per cent. There are loyal supporters of the Association in all districts, however, and the same measure of attention is given to growers and packers who co-operate in grading and marketing, irrespective of the areas in which they are producing. These growers are bearing the whole cost of marketing organisation, and however anomalous this position may appear, a radical departure from the existing system would, in the present state of the industry, only serve to impose a heavier burden on them. Improvements in the marketing system could no doubt be effected, but only by a greater measure of co-operation on the part of the industry as a whole.

According to State groups, the percentage of Association arrivals is as follows:—Victoria and border, 50.4, compared with 50 per cent. in 1936, 52.5 in 1935, and 53 per cent. in 1933 (the Mildura group being 71 per cent. in 1937, compared with 70 and 71 per cent. in the previous years); S. Aust., 76, 78.6, 81, 81; N.S.W. and Qld, 14, 17, 21, 15. Both the Victorian and the N.S.W. percentages were affected by the export of big quantities by Association growers.

Average Selling Prices.

The average wholesale selling price over all varieties was a little lower than last year, chiefly owing to the effect of unfavorable seasonal conditions on the main varieties. Navel oranges were approximately the same, the early districts showing a slight reduction, the intermediate maturing districts an increase of 2d. to 6d., and the late districts a fall of 1/- to 1/6. Lemons, commons, Valencias and Grapefruit were 4d. to 5d. lower, and Mandarins 5d. higher. The figures compiled by the Association

rougher appearance. Waste developed at an earlier stage than usual, and indications of over-maturity in August prompted the advice that fuller advantage be taken of the available market outlets. Consignments did not increase until mid-September, and they included big quantities of S.A. Navel oranges that it had been assumed were being held for the N.Z. market. The heavy supplies and the poor keeping quality of much September arrivals caused a drop in values from which the market did not recover until the end of the Navel season.

A peculiarity of the season's Navel crop was the development of a crop from a late blossoming. This fruit had all the characteristics of second-crop except that it made its appearance on the market as early as August, whereas second-crop fruit does not appear as a rule until December. The harvesting of this fruit created a grading difficulty, as much of it was only distinguishable from the main crop by its lighter color. This false crop was more in evidence in the interstate fruit than in Victorian.

Mandarins.

Mandarins were in shorter supply from Sydney, but increases in the Victorian production, particularly in the Mildura area, made up most of the deficiency. The generally shorter supplies and the better average sizes available on the market were responsible for the improvement in price on the previous season's average.

Grapefruit.

There was a big increase in the Grapefruit crop, but most of the increase did not appear on the market until the last six weeks of the year. In the early part of the season bigger quantities were sent to the case market owing to reduced factory demand, and there were periods of over-supply when the fallen fruit was sent to the market. Much of this early fruit was of uncommercial size, which could not be absorbed, in the proportions received, at payable prices. Grapefruit of counts 126-168 have only a factory or jam-making outlet, but most of this small sized fruit arrived on the market when these outlets were not available. Advertising and the distribution of a specially prepared booklet on the history and use of Grapefruit helped to widen the range of the demand for this variety, and on a comparable grade and size basis, even allowing for the periods of over-supply, prices were on the whole a

	(April-December)		
Total	1937.	1936.	1935.
61.5 Navel	7/-	7/0.4	7/0.7
6.0 Mandarins	7/9.7	7/4.6	6/4
4.5 Lemons	6/4.4	6/8.8	7/0.6
7.5 Grapefruit	7/4.8	7/9.8	7/6.2
4.5 Commons	5/10	6/1.9	6/2.5
16.0 Valencias	8/7.7	9/0.6	9/2.4
			7/9

show the following average wholesale selling prices for the different varieties of Association fruit, all grades and sizes being included:

% of	Variety	(Per Bushel Case)
Total		1937. 1936. 1935. 1934.
61.5 Navel		7/- 7/0.4 7/0.7 6/1
6.0 Mandarins		7/9.7 7/4.6 6/4 5/11
4.5 Lemons		6/4.4 6/8.8 7/0.6 4/10.3
7.5 Grapefruit		7/4.8 7/9.8 7/6.2 7/9.8
4.5 Commons		5/10 6/1.9 6/2.5 5/5
16.0 Valencias		8/7.7 9/0.6 9/2.4 7/9

Navel.

The slower rate of deliveries to the end of August supported the original forecast that the Navel crop would be lighter. Prices were generally on an improved basis, and, as a number of wholesalers were undersupplied, growers were urged, without much result, to take advantage of the favorable selling conditions. The fruit from the earlier Victorian districts was a little below the seasonal average in appearance, the rind texture being much coarser than usual. Heavy rains at the beginning of the year are considered to have delayed maturity and given the fruit a

little in advance of the previous season up to October.

An improved demand coincided with a falling off in supplies owing to most of the Grapefruit packers having to concentrate on filling shipments of Valencias for the N.Z. market, and in completing their Navel and Common Orange packing. Prices rose sharply for the limited quantities then available, but the rise was too sudden and it had the effect of checking the rate of consumption. When Grapefruit consignments were resumed in November it was found that the majority of retailers had not cleared the purchases

SUCCESS IN ADVERTISING.

Citrus Growers Extending Their Campaign.

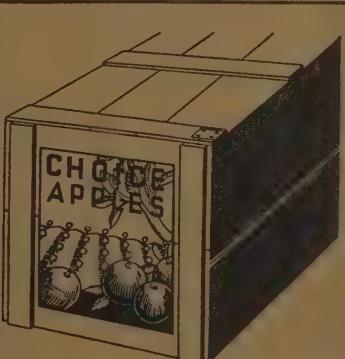
THE SUCCESS which attended the publicity campaign conducted by the Victorian Central Citrus Association has encouraged the industry to extend its efforts. The plan includes co-operation with the other States for an Australian-wide programme.

At one stage a surplus of Valencia Oranges was cleared within a fortnight by a concentrated publicity effort, and the market was stabilised.

The Chairman (Capt. Haled), however, warned growers that "good advertising will not materially benefit poor fruit or fruit which is badly packed and graded."

they had made during the period of shortage, and it became difficult to sell the heavy supplies that are being received on the market. Prices had to be lowered to 1/- a case below the level that had been ruling before the shortage to enable the additional quantities to be sold. In the meantime, the sale of at least 1,000 cases of Grapefruit had been lost, and a reduction of 1/- a case had to be taken on 1,500 to 2,000 cases.

This experience is a convincing demonstration of the necessity of maintaining continuity of supply at stable prices if the best results are to be obtained from a marketing system. Temporary shortages may produce higher prices, but the reaction will be harmful if the shortage is not justified by a reduced volume of crop. The Association's marketing policy is based on this consideration, and if it were not for its system of co-ordination of supplies and prices the greatly increased crops could not be passed into consumption. Admittedly there are exceptional circumstances that do not at times make full co-operation



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Marketing Citrus Fruits — (Contd.)

between the districts and the market possible, as with the Grapefruit during October, or when there is a sudden change in the export demand for Oranges, but these occasions only serve to emphasise the loss occasioned to the industry through the interruption of normal supplies in accordance with the volume of the crop, and the need for preserving an effective system of supervision on the market.

Grapefruit supplies in December were exceptionally heavy, and prices for the month were much lower than for December, 1936, when Victorian and border consignments were very light. Small consignments of Californian and Palestine Grapefruit were received in December, whereas last year the Pacific Coast shipping strike prevented the export of Californian Grapefruit and only small parcels of Palestine fruit arrived. The Palestine fruit attracted very favorable comment from buyers on account of its attractive rind appearance and full juice content, but it is not as well sized as the Californian. Neither the Californian nor the Palestine Grape-

fruit is considered to have a better flavor than the Victorian selected grades, but their even appearance is responsible for their being preferred for some of the high quality trade.

Lemons.

There were smaller deliveries of Lemons to the case market from country growers during the period, but heavier supplies to the growers' market from the metropolitan area influenced prices.

Valencias.

Valencia consignments in November and the early part of December were below market requirements. The demand from New Zealand was so heavy that a number of packers had to suspend packing for the Melbourne market. The different type and sizes of case used for the export markets created a difficulty, as the equipment of most of the packing sheds did not permit of their packing in dump cases and in export boxes at the same time. Efforts to popularise the export boxes on the Melbourne market

have failed, and some of the imported Grapefruit has to be repacked into dump cases to facilitate its sale. Although an attempt was made to concentrate export packing at a limited number of sheds in the one area, supplies for Melbourne were delayed while export packing was in progress. Districts that were not engaged in export packing were encouraged to increase their supplies but the quantity received in November was short of the demand. The condition of the early December arrivals was affected by humid weather at the time of picking, and some, in addition, by treatment for the removal of scale. With the falling off in the demand from N.Z. there was a general resumption of packing for Melbourne with the result that the market in the week before Christmas became over-supplied, and record stocks, for any period of the year, were carried over the New Year.

Special Publicity Clears Record

Valencia Stocks.

The presence of this abnormal quantity of Valencias on the market, and in cool store, at a time when there is only a limited demand for Oranges, and heavy supplies of new season's

fruit are available, was an occasion of grave concern to all interested in the market. In the opinion of representative wholesalers there was no prospect of satisfactorily selling half the carryover, in view of the fresh consignments of fully mature Valencias that would be arriving from the early districts. On a conservative estimate, Association growers were faced with a probable loss of £2,500, apart from the loss that would inevitably occur in the lines that were in poor condition when they arrived. More with the intention of taking some action, rather than with much hope as to its outcome in the circumstances, the Association began an intensive advertising campaign over the air and in the press on the merits of Orange juice. Thanks to the co-operation of all concerned, the appeal had almost immediate results, and before the fortnight was ended the bulk of the stocks were cleared, market supplies were back to normal, and fresh supplies were being absorbed from the early districts. The cost of the campaign was only a very small proportion of the probable saving to the growers.

Loss Through Scale Removal Treatment.

December averages for Valencias were lower by reason of the additional quantity marketed and of the bigger proportion of arrivals that had been treated for scale removal. In favorable circumstances this treatment depreciates the value of the fruit by 1/- to 2/- a case, but, this year, the advanced maturity of the fruit and adverse weather conditions were responsible for the development of heavy waste in transit, and the depreciation, in consequence, was nearer 4/- and 5/- a case.

Paralysis Outbreak.

During the season there were two developments that had some effect on Orange sales. The outbreak of infantile paralysis, with the closing of schools in affected areas and the isolation of a number of school children, limited sales of all fruit in the first few weeks of the epidemic, but the effect was confined to a few localities, and even in them normal trading was resumed when parents recovered from the first shock of outbreak.

Saturday Afternoon Closing.

The closing of fruit shops in the Melbourne suburban areas on Saturday afternoons during the Winter months, May to October, reduced the opportunities of sale of citrus fruits, but it is difficult to estimate the effect of the arrangement on the volume of sales. Retailers claim that the public quickly readjusted itself to the altered selling hours, and that increased sales actually resulted owing to shoppers making their purchases before other occasions of expenditure presented themselves. Some casual trade has been lost, but the retailers claim that the total volume of fruit business transacted on a Saturday afternoon during this period did not justify keeping their shops open. The prohibition of the sale of fruit on Saturday afternoons during these months applies also to football grounds, and while there is room for speculation as to the loss of Orange sales involved, the position could be examined with a view to making representations for the exclusion of these places from the Saturday afternoon closing regulations.

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Investigation on the Storage— Ripening and Respiration of Pears

Color, Pressure and Chemical Composition at Picking.

Length of Storage Life. By G. B. Tindale, B.Agr.Sc., S. A. Trout, M.Sc., Ph.D., and F. E. Huelin, B.Sc., Ph.D., in "Journal of Agriculture," Victoria (abridged).

THE experiments to be described in this paper have been in progress over a number of years, and were initiated by the Victorian Department of Agriculture. In 1932, the scope of the work was greatly extended by the formation of an Advisory Committee on Fruit Storage Investigations, comprising officers of the Council for Scientific and Industrial Research and the Victorian Department of Agriculture. Under the direction of this Committee, the major portion of the work has been conducted at the Government Cool Stores, Melbourne, but certain chemical determinations were made at the Biochemistry School at the University of Melbourne.

Although Pears thrive both at Doncaster and Shepparton, there is a big difference in the climatic and cultural conditions of the two places. Doncaster developed as a fruit-growing centre mainly because of its proximity to the city of Melbourne. The land is undulating, usually rather poor, requires liberal manuring, and the trees are watered sparingly from local catchments or the metropolitan water supply.

Shepparton is an established irrigation district over 100 miles north of Melbourne, and is considerably warmer and drier than Doncaster.

with only one variety of Pear, the W.B.C., together with Peaches and Apricots.

At first there was little if any cool storage accommodation available in the district, and when it was required to cool store Pears for canning later, or when on occasions export was attempted, the Pears had to be picked and packed and then railed to Melbourne for cool storage during the height of Summer, when temperatures frequently exceeded 100 deg. F. Shepparton Pears treated in this way would not keep nearly as well as the Doncaster Pears cool stored promptly after picking, and in consequence the trade accepted the idea that Pears grown under irrigation would not keep. However, it was soon demonstrated, and accepted by the trade, that lack of local, and therefore prompt, cooling facilities and not heavy irrigation in itself was responsible for the poor keeping quality of the Shepparton Pears. Since then very large cool stores have been erected by the canneries for the storing of Pears for canning as required.

The presence of the cool stores in Shepparton has made possible the development of an export trade in fresh Pears from that centre, for it permits of prompt cooling after picking. This trade is now rapidly expanding, lead-

ous physical and chemical changes which occur during storage and ripening.

Experimental Procedure.

In general, three pickings of each variety were made from selected trees at Doncaster, and of one variety only, the W.B.C., from Shepparton. In order to determine the optimum picking time, the pickings were arranged usually at ten-day intervals to cover a period extending both slightly before and slightly after the "commercial" picking period for the district. The "commercial" picking period has gradually evolved, as the experience of growers indicated that picking at that period gave them the best storage results.

In making three pickings at such intervals, the largest Pears are picked first, irrespective of their position on the tree. By the time the subsequent pickings are made, the remaining Pears increase very appreciably in size and approximate in size to that of the earlier picks. By picking over a tree three times, there is the added commercial advantage of spreading the work of picking and packing over a longer period.

No attempt was made to pick the Pears to any particular size, for this is scarcely practicable. In actual practice, picking as above, it is found



Showing cavities in the core, as frequently seen in over-stored Bosc Pears.

commercially. On the other hand, should the crop be a particularly heavy one, and should the season be dry, Pears of each picking might scarcely exceed 2½ inches. This is the minimum size permitted by Departmental regulations governing the export of Extra Fancy Pears.

The Pears were picked from Doncaster during the morning and placed in cool store on the same day, while those picked at Shepparton were railed to Melbourne during the evening and placed in store the following morning.

Color, Pressure and Chemical Composition at Picking.

From time to time the color of the skin, the resistance of the flesh to penetration, the color of the pips and various chemical constituents have been advocated as guides for the optimum picking time.

Optimum Picking Time.

Of the various criteria none is as simple or as generally reliable as the time of picking, for the optimum time of picking does not vary by more than one week from year to year. At the optimum picking time Pears are easily picked, breaking away from the spur when a gentle pull is exerted, or when the Pears is bent backwards. When this time has passed, the early maturing varieties particularly are inclined to fall from the tree. When Pears are picked before the optimum picking time they are rather difficult to pick, hanging so tightly to the spur, that, on picking, the spur is frequently broken away from the tree.

Pears picked before the optimum picking time are very dark green in color and gradually change to a paler green at the optimum picking time. When this time has passed, the ground color gradually develops a tinge of yellow. The optimum picking time for each variety extends over a period of approximately a fortnight.

Pears picked too early fail to develop good quality on ripening after storage. Pears picked too late are of excellent quality on ripening, but have



Illus.
courtesy Vic.
"Journal of
Agriculture."



Core breakdown as typical of over-stored Pears. Left, with core only affected; right, with both core and flesh affected.

The trees are heavily watered from the Goulburn Irrigation Scheme. The area is flat, and the soil and climate seem ideal for growing Pears, the trees being exceptionally prolific and the Pears being very bright (free from russet), as it is not necessary to spray as frequently to control Black Spot as in the moister Doncaster district.

In Shepparton is situated the largest cannery in the Southern Hemisphere, and the district was planted originally

to the planting up of new areas of the best export varieties.

Object of Investigations.

The object of the investigations has been to determine the effect of temperature and picking maturity on the storage life of various varieties of Pears, and the factors responsible for the development of the disorders of mealiness, core breakdown, and scald. This involved measurements of the daily output of carbon dioxide of the Pears and of the vari-

that most of the pears range in size from 2½ inches to 2¾ inches. Where the crop is light the individual fruits tend to be large. In this case, a greater percentage of the crop would be picked at the first picking, and most of the Pears might be of the 2¾-inch size, and at subsequent pickings would have grown to over 3 inches. While it has been found that Pears over 3 inches will keep just as long as small Pears of similar maturity, very large Pears are not popular

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CARTAGE ARRANGED EX ORCHARD, RAIL, STORE, Etc.

COOL STORAGE SPACE AVAILABLE

Long or Short Storage.

FOR EXPORT OR LOCAL TRADE.

100,000 Cubic Feet of Space in THREE ALL-MODERN STORES.

Rates and Particulars from:—

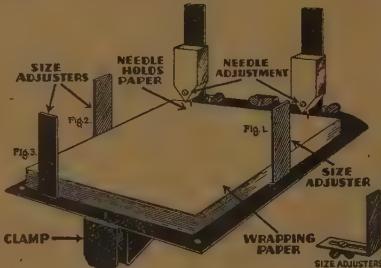
W. Woodmason Ice Supply Pty. Ltd.

320 GLENFERRIE ROAD, MALVERN — or U 2623.

Oakleigh Telephone: UM 1820.

Hawthorn Telephone: Haw. 791.

The Improved "FASTPAK" Paper Holder



Has now been improved by:— Providing a bracket attachment which enables the machine to be clamped on either the Grader or box.

Adjustors have been extended to allow the insertion of a full ream of paper at the one operation.

Double-Needle Control ensures that there is no waste or unsightly torn corners.

Adjustable to take various sizes of paper.

Remarkable for its speed and smoothness and definitely improves Packers' Tallies.

Manufactured by and obtainable from—

Southern Victoria Pear Packing Co. Ltd.

BLACKBURN, VICTORIA
or Interstate and District Agencies.

NAILING MACHINES

Smooth in Operation and of Proved Reliability.

Illustration shows our latest model 6 track machine. An economical unit for making up, including centre board nailing.

**D. W. BINGHAM & CO.
PTY. LTD.**

Manufacturers of
Modern Machinery of guaranteed workmanship and performance.

Address: 224-226 Normanby Road, South Melb.

Tel.: MX 2693-MX 1351.

Telegrams: Bingmach, Melb.

Various Ranges of Temperatures.
A Complete System of Cold Storage and Insulated Transport.

a shorter storage life. Pears picked at the optimum time combine reasonably long storage life with good quality on ripening. The optimum picking date for each variety is within one week of the date of the second picking, i.e. (Doncaster), W.B.C., February 6; Howell, February 15; Bosc, March 3; Packham, February 26, Winter Cole, March 10; Josephine, March 17; Winter Nelis, March 20.

There is little risk attached to picking Pears too early provided they are not undersized, but one should avoid picking Pears with a tinge of yellow.

Length of Storage Life and Physiological Disorders of Cool Storage.

When a Pear is picked at the optimum stage of maturity it is hard and green. During cool storage at the usual temperature of 32 deg. F., it will soften slightly and gradually change color, but will not develop aroma, flavor and juice, the characteristics of normal ripening. Ripening will only take place at temperatures which are usually much higher than those used for cool storage purposes. The optimum temperatures for ripening will be discussed in detail later, but it is sufficient to mention here that the W.B.C. and possibly the Bosc varieties will not ripen normally below a temperature of 65 deg. F. The other varieties will ripen at 45 deg. F., and above.

In the experiments, samples of Pears of all varieties and maturities were removed from storage at temperatures from 30 deg. to 37 deg. F. to a ripening room maintained at 65 deg. F., at which temperature all varieties ripened satisfactorily. It was found that only a certain number of removals (varying with variety and storage temperature) ripened at 65 deg. F. with the full development of aroma, flavor and juice. Subsequent removals lacked both flavor and juice at 65 deg. F., and then developed physiological disorders of meanness, core breakdown and scald.

Meanness is a condition of the Pear in which both flavor and juice are lacking and the flesh is dry and easily broken by hand pressure into small fragments without exudation of juice.

Core breakdown, sometimes called core collapse, internal browning, internal breakdown, is characterised by a softening and darkening of the tissues in the region of the core with the core easily separating from the flesh. The disorder may be closely confined to the core, but may extend to the surrounding portions of the flesh. In the incipient stages, the flesh is fairly soft, but in the later stages remains hard and discolored with a disagreeable

odour and taste. In the Bosc variety, cavities frequently appear in the core, and this may easily be mistaken for brown heart.

Scald is characterised by a discolouration of the skin and later of the flesh. The flesh is hard and has a disagreeable odour and taste. Scald is sometimes difficult to detect on russeted varieties.

The fact that these disorders eventually develop in all varieties definitely indicates that they are merely normal changes associated with the prolonged storage of Pears. In this respect, they are different from such disorders as Jonathan scald in Apples, which is spasmodic in its incidence, and occurs during the early stages of storage.

The maximum length of time Pears can be kept in cool store and still ripen normally on removal to a ripening temperature is termed the "cool storage life." The length of storage life varies appreciably with variety, and is dependent on the storage temperature, the maturity of the fruit at picking time, and the interval between the time of picking and placing in store.

The

Length of Storage Life of several varieties at various storage temperatures was determined by removing samples from these temperatures to 65 deg. F., and noting the time when the fruit failed to ripen normally. The W.B.C. Pear, for instance, ripened at 65 deg. F., with full development of flavor and juice when removed from 32 deg. F. after 12 weeks, but when removed after 14 weeks was lacking in flavor and juice. Samples removed after 16 weeks at 32 deg. F. developed core breakdown. Thus the length of storage life of the W.B.C. Pear at 32 deg. F. was 12 weeks. In the W.B.C. variety the interval between the removal which ripened normally and that which developed core breakdown was only one month, but in the other varieties there was a fairly long period during which slightly over-stored Pears ripened with fair flavor and juice. The quality of these Pears, however, was definitely inferior to that of the excellently flavored juicy product of the earlier removals.

The marketing of these slightly over-stored Pears should be avoided, because buyers being disappointed with the quality are likely to condemn this variety for its poor flavor and juice. It is difficult to tell from the appearance when the Pear is slightly over-stored, but one can be guided to a large extent by the figures for the length of storage life obtained from experiments over several seasons.

(To be continued.)

METRO-ICE

Metropolitan Ice and Fresh Food Co. Ltd.

Freezing and Cold Storage Facilities for All Classes of Produce

Main Works:

BEDFORD STREET,
NORTH MELBOURNE
(Near Haymarket)

Branch Works:

SPENCER DOCK,
Yarra Bank Rd., South Melbourne
(Near Spencer St. Bridge)

Telephones: F1171 (6 lines).

Telegrams: "POLAREGION," Melbourne.

Central Positions.

Insulated Lighters and Trucks.

Various Ranges of Temperatures.

Cool Storage Available

GOVERNMENT STORES NOT TO BE REBUILT

After conferring with commercial cool stores, the Victorian Government has decided not to rebuild the Government Cool Stores that were destroyed by fire last year. Finding that plenty of suitable space is available for fruit storage in the existing commercial cool stores, the Government felt that the expenditure of a large sum on a rebuilding programme was not necessary.

BOURKE STREET ICE AND COLD STORAGE.

This central city cold store advises fruit producers that storage space is available for all classes of fruit and that every modern facility is provided for correct handling. Correct temperature control is a feature of this store. Due to wide experience gained in handling all classes of fruit for many years for the local fruit trade, the Bourke-street store is able to offer growers the very best service obtainable. No two kinds of fruit are stored together, and special chambers for all separate classes are provided. Whilst providing expert service, the proprietors particularly urge all growers placing fruit in cold storage for the local market to see that only good, sound, clean fruit is sent in for storage for any period. The Bourke Street Cold Stores give it every care whilst in the store, and by watching its behaviour during the storage period are in a position to advise growers as to its condition, if it should be removed while in a saleable condition, and so increase a service to their clients.

The secret of the cold storage of fruit, additional to modern storage facilities, lies in the state of the fruit when received for storage. It should be good, clean, and sound, not overripe, well selected and well packed. Under these conditions storage means success to producers.

The Bourke Street Ice and Cold Stores invite enquiries regarding space, rates, periods of storage and any other information desired by telegram, letter, or telephone Central 2383.

METRO ICE.

New Cool Stores Ready.

As the result of negotiations between the Minister of Agriculture, the Hon. E. J. Hogan, and the Metropolitan Ice and Fresh Food Company Limited, the company was required to construct additional cold storage accommodation for all classes of produce for export, to replace that space which was destroyed by fire at the Government Cool Stores at Victoria Dock last year.

This additional space has now been completed, comprising 50,000 cubic feet at the company's main works at North Melbourne, and 150,000 cubic feet at a new Branch Stores in Yarra Bank-road, South Melbourne, adjacent to the Spencer-street Bridge.

Consequently fruit growers and exporters are now advised that space can be obtained at many of the metropolitan cool stores. Attention is directed to several cool stores advertising in this issue. Quotes and fuller particulars may be obtained by communicating direct with these companies or by telephoning their offices.

The major portion of this additional space is constructed and equipped principally for the handling of fruit for local and export trade. The convenience of the various merchants at the fruit market and fruit exporting firms has been carefully considered, hence the provision of fruit storage space at both works, so that merchants may choose whichever works is the most suitable for their respective points of view.

The company also operates a large fleet of insulated motor trucks, and complete transport facilities for the movement of fruit from the railways to the stores, and transport of fruit to the ship's side can be provided.

Clients will find that all rates and charges are the same as those previously charged by the Government Cool Stores, and with the special attention being given to the quick handling of produce, merchants and exporters can be assured of a complete and economical service by reason of the modern and well equipped works at both North and South Melbourne, with an experienced cold storage and warehousing personnel, with the complete and economical transport service, and with the financial facilities which are available.

WOODMASON'S.

Three Modern Stores.

For the past 15 years, Woodmason's have been intimately associated with the cool storage of fruit and their present three stores are available to growers. The direct expansion system is used and heavy cork insulation ensure even and proper temperatures at all times.

At the Glenferrie-road Malvern store, one large city fruit manufacturer utilises Woodmason's stores for a large quantity of its fruit for canning and jam making, and Mr. F. J. Andrew, the well-known fruit exporter, reported that the Pears stored by Woodmason's last season arrived in London in very good condition, and realised very satisfactory prices. So satisfied was he with the service rendered by this company that he is maintaining storage space for this present season.

Cartage from Toorak, Oakleigh and Hawthorn Stations is free to clients, and, as their advertisement states, fuller particulars, quotes, and enquiries may be made to any of their three stores or by telephone to the Malvern Head Office, U 2623.



Front view of the new section described herewith.

BRIGHTON COOL STORES.

New Store Erected.

As the illustration shows, the Brighton Ice Works and Cool Storage, 90-92 Durand-street, Brighton, have just completed their new cool store for fruit ready for the present season. The capacity of the new section is 50,000 cubic feet, which brings the total capacity up to 85,000 cubic feet.

All equipment installed is brand new and of the most modern design. Direct expansion system with automatic temperature control ensures perfect storage.

A feature of Brighton's service to fruitgrowers is the provision by the company of insulated motor transport from the orchard, which will deliver fruit for storage without deterioration even on the warmest days. Growers will be quoted cartage rates according to distance.

Fruit that is railed should be consigned to the North Brighton Railway Siding and delivery to the cool store will be arranged. Quotes for space and all other particulars required can be had by mail or by telephone X 2015 or at night X 5961.

NORTHCOTE AND DISTRICT.

The Northcote and District Ice and Cool Storage Works offer fruitgrowers the experience of 20 years in fruit cool storage and admirable facilities in their all-brick cool stores, insulated with 3-inch cork board and having a capacity for 60,000 cases.

An expert staff of packers and graders is employed and all fruit is carefully handled by experienced carriers and storemen. A fleet of motor trucks provide picking up services within a 50-mile radius from Melbourne, and the charge for cartage is at a minimum rate.

Northcote Cool Stores have a reputation for fruit handling and bookings are consequently brisk. Growers are advised to book space ahead of requirements. All particulars, storage rates and other information may be obtained upon application to the head office, or by letter or telephone JW 1185, as shown in their advertisement in this issue.

J. P. SENNITT & SON PTY. LTD.

This Company has been favorably known for fruit storage for the past 35 years, and has recently added three new cool stores for fruit with a capacity of 30,000 cubic feet, bringing their total capacity for cool storage up to 240,000 cubic feet.

Sennitts is one of the oldest cool storage companies in Victoria, having stored the first Tasmanian Apples ever stored on the mainland. All stores are on the direct expansion principle, with complete temperature control. Exceptional facilities are provided for deliveries either from rail or motor transport. Their cool stores are well lighted, centrally situated and have packing facilities for the use of their clients.

Sennitts are so well-known in the ice and ice-cream business that no further introduction is necessary to Victorian fruit growers. Any particulars required, or quotes for space can be obtained upon application to the head office on the south bank of the Yarra, Riverside-avenue, South Melbourne, or by telephone MX 1181.

FLOYD'S, MOONEE PONDS.

With a record of 25 years in cool storage service to a big clientele, Floyd's Cool Stores are in a position to offer splendid facilities to fruitgrowers and merchants for storage space in their well-equipped plant.

Rebuilt three seasons ago, the cool stores are all brick, well insulated and constructed upon the latest scientific lines. Direct expansion system, capacity for 16,000 cases, storage for both export and local trade fruit, cartage from rail and to boat, are only a few of Floyd's qualifications for the job.

The whole works are under the personal supervision of Mr. W. J. Floyd, son of the founder of the business, and intimately acquainted with every phase of cool storage. Their telephone number is FU 6402.

Liquidation Stocks of Organite Fertiliser, £4/10/- per ton, ex Store.

Write for pamphlet.

Avery's Garden Insecticide Co.
67 Burnley St., Richmond, Melbourne.

Sennitt's have Cool Storage Space

EXPORTERS AND GROWERS are advised that we have added Three New Cool Stores for fruit, ready for the present season.

AIRY, WELL-LIGHTED RE-PACKING SPACE AVAILABLE FOR OUR CLIENTS.

Quotes for space and full particulars upon application.

J. P. SENNITT & SON Pty. Ltd.

RIVERSIDE AVENUE,
SOUTH MELBOURNE.

TELEPHONE:
MX 1131 (5 lines).

Brighton Ice Works & Cool Storage

OFFER FRUITGROWERS

Perfect Storage in our new Cool Store just completed, adding 50,000 cubic feet space.

AUTOMATIC TEMPERATURE CONTROL.

Insulated Motor Transport Available.

Quotes, Space, Particulars upon Application by Letter or Telephone.

90-92 DURANT STREET
BRIGHTON, S.5.

Telephone: X 2015.
Night: X 5961.

THE MARKET GROWER

OFFICIAL ORGAN OF VEGETABLE GROWERS' SOCIETY OF VICTORIA.
ALSO OFFICIAL ORGAN OF THE KOONDROOK & BARRAMON TOMATO GROWERS' ASSOCIATION.

Vegetable Culture

The Importance of Mulching — Cabbage and Cauliflower for Winter Use — Seed Sowing and Transplanting Seedlings — Soil Preparation and Cultural Hints.

(By Our Correspondent.)

In view of the very dry Winter, Spring and Summer we have experienced it is of interest to consider the value of mulching crops to bring them up.

Mulching is an art, and a tremendous aid in dry weather that is very often neglected, but when done properly shows a good return for the trouble. When planting seeds of Carrots or Parsnips during the months of January or February it is essential that the land be well prepared during the two previous months, so that it is holding the maximum amount of moisture; this will often mean the success or failure of a crop which is to be planted during the dry months.

Once the crop has struck a new root in properly prepared ground it will stand up to a vast amount of hot, dry weather, but if the land has not been well prepared the young plant will probably burn off with the first really hot day.

The Method of Mulching.

When the bed has been prepared by digging or ploughing and the crop is to be watered to bring it up, it is better to plant before nine o'clock in the morning or after 3 o'clock in the afternoon. Sow the seed as shallow as possible.

If the land is inclined to be sandy it will not matter if the seed is not covered when sowing, but having sown the seed in the required drills, then walk on top of it, placing the heel to the toe, and thus, with the weight of the person so tramping, a nice hollow will be left along the line where the seed is sown, leaving a nice drill for the water to run to later on.

Do not water the land before you put on the mulch, for this only tends to run the soil together, and make a hard surface which the seed cannot break through. When the sowing has proceeded so far, then apply the manure—stable manure for preference—and if short of suitable covering just sow it down the seed drills where it has been tramped down; if

manure not available, chaff without any oats or wheat in it is very suitable. Grass which has been dried, old straw which is well broken or leaves off trees will act if nothing else is available.

Now the bed is ready for watering, and for the first two waterings the bed should not receive too much water—just enough to set the land; a little water every day increasing the quantity after the first two waterings so that the ground where the seed is planted is nicely damp to a depth of 6 inches.

The crop must be watched very closely for as soon as it is just under the ground, and before it breaks through the ground the mulch must be raked off; this is very important, for if the young plant comes up into the mulch it makes a long, tender stem through the mulch it will be too delicate to resist the hot days, as they come.

If the mulch has not been applied too heavily it is a good system to rake it in between the rows, but if a heavy dressing has been applied then it must be raked into the furrow out of the way.

Frequent watering will still be needed to hold the crop now that it is above the ground; the land must not be allowed to become dry on the surface until the crop is well out in rough leaf, when it can usually battle along for itself, but with these crops you cannot work them too often, and to stir the surface of the land once a week is a great help in getting a good crop.

Cabbages and Cauliflowers.

And now a few words on the planting of Cabbage and Cauliflower plants, as it is during January, February and March that the bulk of these vegetables are planted out, more particularly Cauliflowers, for different sorts of Cabbage can be planted all the year round.

The first essential to a good crop is a good plant, and having got this,

Tomato Mite

Importance of Early Treatment of Infested Plants.

IN RECENT YEARS ADVICE has been given repeatedly concerning the necessity for adopting control measures against mite in mid-season and late Tomatoes, but, owing to failure in many instances to adopt the measures recommended, states the N.S.W. Department of Agriculture, the mite remains our most serious pest of Tomatoes during the Summer and early Autumn, and severe losses are experienced every year.

The mites are extremely small and only become visible on the foliage under magnification. Consequently, their presence in crops frequently is overlooked, although they may be causing serious damage. Hundreds of these small, yellow mites may occur to the square inch of foliage, and their presence will shorten the productive life of the crop very considerably. They feed on the surface tissues of the stems, the fruit and the foliage, reducing the vigor of the plants and causing shedding of blossoms and stunting of the fruit. Usually severe infestation does not show up before the first trusses of fruit have matured, although occasionally plants are affected earlier and the crop is a total loss.

Symptoms of Attack.

The first sign of infestation is a silverying of the foliage and a drooping and curling of the lower leaves.

the next necessity is to have the land in good order. When ready to start planting it is a good plan to water the plant bed the night before; this will give the plant a chance to have the fibres well into the soil and when the bed is watered just before pulling the plants, they will come up with a nice bit of damp earth clinging to them. This is a great help in planting to get a good strike.

The plants should not be pulled too long before planting—if possible straight from plant bed to land which is to be planted. Freshly ploughed land will always ensure a good strike, however hot the weather may be.

Plant each seedling about two feet six inches apart. An old shovel or fork handle about twelve to fifteen inches long and pointed at the end makes a very good dibber to make the hole for the plant, but care must be taken that a hole is not left below the root for this leaves an air pocket which plants do not like.

Having put the plant to the required depth, now cover a little dirt over the root—sufficient quantity so that you will not wash the dirt off the root when the water is applied. Fill the hole with water, and next morning again fill the hole with water. This should now be sufficient and soon after applying the water on the second day, loose earth should be pulled into the hole, but care must be taken not to put earth into hole while there is any water left in it, as this will only tend to puddle around the root.

This should now be sufficient water to give a good strike, and if hoed about ten days after being planted the ground should not require any more working for some time. Cauliflowers particularly do not like to be fiddled round with, and after half-grown only require the weeds to be kept in check.



"Plane" Brand Dusts

"Beauty" (Knapsack) Dusters
"Superior" (Rotary) Dusters

ARE MANUFACTURED BY

N. N. McLEAN Pty. Ltd.
395 Queen Street
MELBOURNE

Both the stems and the leaf stalks have a smooth appearance, due to destruction of the epidermal hairs by the mites. Later, the stems and under-surfaces of the leaves become brown and the skin of the fruit sometimes has a roughened corky appearance. In the final stages of infestation the leaves wither and die and the plant becomes defoliated except for fresh green shoots which appear at the top and base of the plant.

Infestation usually is not severe in districts where only Spring or Autumn crops are grown, but where plantings extends over several months of the Spring and Summer or of the Summer and Autumn, the later plantings usually are heavily infested.

Control.

Treatment to prevent Tomato mite infestation should become a routine practice in most areas, and must not be delayed until symptoms of damage appear, as by that time the plants will have suffered a severe setback, and some losses of crop will result. Where picking extends into January in early Spring crops, a treatment for mite should be given about the middle of December.

Summer crops should be treated in the seed bed, again about six weeks after transplanting, and subsequently at three to four weeks intervals.

Autumn crops planted out in January and February should be treated in the seed-bed and again after transplanting about a week before routine Bordeaux applications commence.

Tomato mite can be controlled by:

(1) Spraying with lime-sulphur (1 in 100; i.e., 1 pint to 12½ gallons of water); or

(2) Dusting with fine sulphur mixed with an equal part of hydrated lime.

Where spraying with lime-sulphur follows treatment with Bordeaux, some injury may result, but dusting with sulphur will not affect the plants. For control of the mite on Tomatoes which are receiving regular treatment with Bordeaux, either wettable sulphur (1 lb. to 12 gallons of water) or colloidal sulphur (1 lb. to 50 gallons) may be added to the Bordeaux sprays. Wettable sulphur requires frequent agitation to prevent it from settling on the bottom of the spray container.

CENTAL BAGS FOR ONIONS.

Victorian Onion growers are being increasingly requested by interstate buyers to use cental bags instead of larger sized sacks.

It is estimated that at present 80 per cent. of the Victorian Onion crop is packed in 150 lb. sacks. Opinion generally in the trade, however, is that if the cental bags were used more Onions would be used. N.Z. also prefers the cental to the larger sized sack.

Protect Your Plants

FROM SNAILS, SLUGS, APHIS, AND ALL GARDEN PESTS WITH

PESTEND SUPERFINE

(Tobacco Dust)

Expert gardeners and growers recommend the use of PESTEND SUPERFINE—either for dusting, spraying, or for dressing the soil.

Used in a spray-duster or pressure-gun, PESTEND SUPERFINE adheres better, lasts longer, and costs less than ordinary spraying powders.

PESTEND SUPERFINE Tobacco Dust is non-poisonous to plants, inexpensive and easy to use. Try it out yourself!

Obtainable in 4 lb., 28 lb., and 1 cwt. bags at all produce stores, or direct from W. D. & H. O. Wills (Aust.) Limited.

5869-37

Australia's 150th Anniversary

Historical Review of Fruit Marketing in Sydney Australia's Oldest City

Sydney Fruit and Vegetable Markets

Governor Bligh Opened First Site 132 Years Ago

THE PUBLIC MARKETS in Sydney date back to 1806, when Governor Bligh, of Bounty memory, by a Government and general order, dated August 23, established the first market place in lower George-street, on ground slightly south of the first hospital site.

For a number of years after the foundation of the new Colony in 1788, there was no appointed market place, most of the produce then changing hands at what was then known as the King's Wharf, in Sydney Cove.

The new town soon outgrew its first market site, and a new one at the foot of Church Hill was proclaimed in 1809, but this served its purpose for only about eighteen months. On October 25, Governor Macquarie ordered the market to be transferred to George-street, to land now occupied by the Queen Victoria Buildings. Macquarie provided rough sheds for protection from the weather, he had a market house or store erected, and promulgated a comprehensive set of market regulations. Several years later, Macquarie had plans prepared for elaborate market buildings, but these were vetoed by Commissioner Bigge, who had been sent out from England to inquire into the affairs of the Colony of New South Wales.

During Governor Burke's regime, new sheds were erected on the George-street Market Square; the first was built in 1832; the second in 1833, and two others in 1834. Each of the sheds was 200 feet long by 30 feet wide, and divided into stalls, those on the York-street side being used, one for the sale of meat, poultry and dairy produce, and the other for fruit and vegetables, while the sheds on the George-street frontage were occupied by wholesale dealers. This disposition was altered some time later. A number of "emigrant mechanics" brought out from England by Dr. Lang were employed on the erection of the sheds, which were rather substantial buildings, much stonework having gone into their construction.

In 1829 Governor Darling established a cattle market on the south side of Campbell-street, east of George-street, and in 1834 Governor Bourke established a hay market be-

tween the cattle market and George-street. The cattle and hay markets occupied the area bounded by George, Hay, Castlereagh and Campbell streets. To-day such buildings as the Capitol Theatre, Grand Opera House and the Hotel Sydney stand on the site.

Council Takes Control.

Sydney was incorporated a city in 1842, and in that year the management of the markets was handed over to the first City Council. The lands and buildings were granted to the Council in 1846. In 1859 the sheds at the George-street Markets were united by the construction of a central roof, and shops were erected along the George and York-street frontages of the square. The cost of improvements was about £12,000. New sheds for general market purposes were erected on the cattle market area at a cost of £7,500, being opened by the Earl of Belmore in 1869, and named Belmore Market in his honour. By this time the cattle market had been superseded by sales yards beyond the city limits, and the venue of the hay trade had moved to the railway yards.

A fish market was established at Forbes-street, Woolloomooloo in 1872. Extensions were made to the fish market in 1888, and in 1893 a new and larger building with refrigerating rooms was erected on the site at a cost of about £17,000.

The George-street Markets had assumed a very dilapidated appearance in 1891, and in 1893 the erection of a new building was commenced. This building was opened in 1898, and was known for a number of years as the "Queen Victoria Market Building," but subsequently the "Market" was dropped from the name. Another market building (known as the New Belmore Market) was erected opposite the Old Belmore Market, and opened by the Mayor, Mr. W. P. Manning, in 1893. Prior to the erection of the new building, the site had been used for "Paddy's Market," a bazaar held every Saturday night. "Paddy's Market" was quite a feature of Sydney of the 'eighties. On this open space each Saturday night would be found circuses and side-shows of all descriptions, itinerant musicians, street-

corner missionaries, pie and green-pea vendors, merry-go-rounds and stalls displaying all manner of wares.

each roadway are footways for the use of purchasers and others. Hardwood benches for the display of vegetables and other wares flank the footways.

Belmore Markets Displaced.

With the erection of the new Belmore Market, the wholesale fruit vegetable, and produce markets of Sydney were concentrated in the Haymarket area. But once more the city outgrew its market places, and it became necessary for the Council to seek an area on which to erect more commodious and modern buildings. Eventually it decided on the area bounded roughly by Hay and Thomas-streets, and the Darling Harbour Railway and Yards. The land was resumed, and the markets in use to-day erected. Provision was made for the marketing of vegetables, fruit, fish, poultry and cold storage works, and a number of market stores were built. Subsequent to the opening of the new markets the Woolloomooloo Fish Market and both of the Belmore markets were put to other uses.

The Council has approved of the erection of a New Vegetable Market, on an area of 190,000 square feet, bounded by Hay, Harbour, Little Pier and Lackey street, and has acquired an area of 109,000 square feet for a new produce market, bounded by Hay, Lackey and Pier streets. The existing Vegetable and Produce Markets are to be remodelled.

The Municipal Markets now cover a total area of 25 acres.

Vegetable Market No. 1.

This market has frontages to Hay, Thomas and Quay streets, and a thoroughfare separating it from the No. 2 Vegetable Market, the whole area comprising over two acres. Accommodation is provided for about 192 vehicles, and a similar number of stalls; at the western end of the building are 116 agents' stands, and 52 agents are accommodated on the southern footway outside the markets.

There are seven roadways, 18 feet wide, extending across the full width of the building from Hay-street to the roadway separating No. 1 and No. 2 Vegetable Markets. On each side of these roadways is space for vegetable growers' waggons. Between

Offices, staff-rooms, stores and public conveniences are provided, in addition to the general market space. The market building is comparatively plain in design, but the facades are relieved by a stone cornice and parapet, with pediments and gables over each entrance, and a circular tower at corner of Hay and Thomas streets. Throughout the walls are of brick-work laid in cement mortar, and faced with open-kiln bricks. The floors to roadways and cart docks are of concrete, rendered and finished with asphalt, while the floor to the pedestrian space is formed of tarpaving.

Support by steel principals and stanchions, the plate-glass and corrugated galvanised iron roof fitted with louvres affords a maximum of light and ventilation. Alderman Allen Taylor, then Lord Mayor of Sydney, opened the market on November 16, 1909, the total cost of the building being £45,986.

No. 2 Market.

Devoted to the sale of root and other vegetables, such as Pumpkins, etc., the Vegetable Market No. 2 is erected on a site having frontages to Ultimo - road, Quay - street, and thoroughfare separating Nos. 1 and 2 Vegetable Markets. The site comprises an area over 1 acre.

Floor space of about 10,720 square feet is provided for general market purposes. A roadway 20 feet wide, and running from Quay-street to Ultimo-road, divides the floor space into two sections.

Refreshment shops, each of two floors, are situated at the eastern and western corners of the dividing road. An hotel occupies the corner of Ultimo-road and Quay-street, the Council being the lessor, while the frontages of Ultimo-road and Quay-street are occupied by Market Stores, 22 in number.

Twelve of the stores are of two storeys and basement, the average size of the ground floors being 30 ft. by 16 ft. Entrances are provided from the street frontages and the market.

Telephone: MA 3846.

Established 1900.

W. Musgrove & Son
Licensed Farm Produce Agents
8 City Fruit Markets, Sydney
Our Motto—Quick Sales and Prompt Settlements.

FORWARDING NUMBERS:

Tasmania, Victoria, Sth. Aus., No. 53. Q'land, Northern Rivers, No. 18.

FRUITGROWERS!

FOR SATISFACTORY RESULTS,
SEND YOUR FRUIT TO

F. H. G. Rogers
Fruit Selling Expert
Municipal Markets, Sydney

SHIPPING NO. 83.

Established 1900.

SYDNEY FRUIT TRADE PICNIC AT PEARL BAY, MIDDLE HARBOUR,
1903.



In the group are (reading from the front row, left to right)—E. Alderson, Alf. Cooper, Con. Piggott, —, T. Jessop, M.L.A., Jas. Kidd, M.L.A., L. Jackson, A. Forsyth, L. L. Earl, G. B. Edwards, M.H.R., Coleman, W. S. Campbell, Terry Holmes, E. Johns, W. H. Price, Jas. Slater, Fred Chilton, J. Saunders, T. Howard, F. G. Stevens, D. Hunter, —, R. Jolly, —, Alf. Howard, T. Lawless, —, T. S. Mitchell, H. Hall, —, Asher Phillips, E. Chudley, J. Martin (Fruit Inspector), Jas. Dive, H. C. Doran, F. H. G. Rogers, E. Rule, E. Robards, A. Gibbs, H. Robards, Joe Hopkins, B. Isaacs, Devlin, J. Barrett, W. Tuckerman, Syd. Howard.

F. CHILTON

Licensed under Farm Produce Agents Act. Established 1894.

SHIPPING NO. 56. FRUIT COMMISSION AGENT.

Highest Market Prices. Prompt Returns. Reliable Advice.

Registered Address for Telegrams and Cables: "CHILTONS."

References:—Bank of New South Wales, Haymarket, Sydney and Growers throughout Australia.

CITY FRUIT MARKETS, SYDNEY

GROWERS!

To Obtain Top Price, Consign Your Fruit to

H. J. GREENTREE

LICENSED FARM PRODUCE AGENT

"The Growers' Friend" — Established 1920

Municipal Fruit Markets — Sydney

Interstate Shipping Nos.: Tasmania, 228. Queensland and Victoria, 40.

— Phone: MA 1769. —

REEDY BROS.

Licensed Farm Produce Agents

MUNICIPAL MARKETS, SYDNEY

The Complete Fruit and Vegetable
Selling Organization

SHIPPING NUMBERS:

MAINLAND — 11
TASMANIA — 273

PHONES:

MARKETS — MA 2483
PRIVATE — UY 3320

CONSIGN YOUR FRUIT TO—

Hopkins & Lipscombe

Proprietor: STANLEY H. POGSON.

Licensed Farm Produce Agent

Municipal Markets, Sydney

PROMPT RETURNS.

SHIPPING NUMBERS—58 Victoria and Tasmania, 68 Queensland.
Bankers: Bank of N.S.W., Haymarket, Sydney.

SYDNEY FRUIT AND VEGETABLE MARKETS—(Continued).

The total cost of the building, which was opened in July, 1910, was £28,351. A steel roof, covered with corrugated galvanised iron with glass panels, extends over the dividing road between No. 1 and No. 2 Vegetable Markets. Serving as shelter for agents' stands, vehicular and pedestrian traffic, the roof was constructed at a cost of £2,610.

Including a Cold Storage Works, the Fruit Market block covers a site with frontages to Hay-street, Ultimo-road, Quay-street, and bounded on the western side by the Darling Harbour Railway Yards and Wheat-road, the total area being nearly three acres, of which 72,000 square feet are reserved for general market purposes, exclusive of stores, cold storage space, railway siding, etc.

The walls of the building are solid brick, the roof being a steel structure covered with corrugated galvanised iron containing glass fanlights.

The entrance to the market from Quay-street is provided by two passages approximately 6 feet wide. A central roadway 24 feet wide runs the whole length of the building from Hay-street to Ultimo-road and forms the vehicular thoroughfare.

A railway siding extends from the Railway Yards into the market, entering at the northern end, where there is situated the Municipal Cold Storage Works, elsewhere described.

Thirty-seven stores in all occupy the frontages to Ultimo-road and Quay-street, the average size being 34 ft. 8 in. by 15 ft. 9 in. Thirty-three of the stores are of two storeys in height, the ground floor being of concrete, and the first of timber, and each store has entrance from the street and the market area.

Over the main roadway there is a block of twenty offices, each 18 ft. x 14 ft. Sanitary conveniences are provided at each end of the block. There is a public sanitary block replete with all conveniences in Ultimo-road frontage.

Nine stores opening on to Wheat-road and the market space are situated in the south-western portion of the building; six others are at the northern end of the market, occupying the frontages to Quay and Hay-streets.

Alderman Sir Allen Taylor, then Lord Mayor of Sydney, opened the building to the public on November 22, 1911. The total cost of the building, including the cold storage block, was £116,981.

Cold Storage Works.

The Municipal Cold Storage Works is situated at the northern end of the Municipal Fruit Market, and forms part of that building. Access to the works is gained both from Hay-street and the interior of the Fruit Market.

When erected, the construction embraced all the latest methods of insulating walls and partitions, floors, ceilings and doors. The main external walls are constructed of brickwork in cement, with "nonpareil" cork and Delta insulation, and are cement rendered. All floors and ceilings are of cork-board cement rendered, whilst the intermediate divisions are of con-

crete with cork insulation, and insulated hinges and sliding doors. There are two floors to be cooled. Fruit chambers and attemperator space are located on the lower floor, which contains approximately 68,000 cubic feet of air space. On the floor above there are freezing chambers and a distributing passage, the air space being 146,000 cubic feet.

Originally the stores comprised three floors, but some years ago the ground floor cold chambers were eliminated, and new rooms constructed on the second floor. In all, there are twenty-four storage chambers; of these four are fitted with the "dry battery type" air circulation system, three are operated by the "wet battery type" air circulation system, the "direct expansion" system only being employed in the remainder.

Thirteen cold rooms on the second floor were used originally for freezing mutton and lambs, but are devoted now mainly to the freezing and storing of rabbits for export, the temperature carried being 5 degrees Fah. These rooms may be converted, when required for the storage of fruit, produce which is stored at a relatively high temperature.

Complete elevating and conveying facilities are provided for the rapid and economic handling of goods. All conveyors converge on to a loading (or unloading) platform served by a railway siding connected with the main railway system of the State. This siding permits of the receipt of produce from all parts of the State by rail direct, and enables the loading of produce into railway trucks for delivery to overseas ships.

Situated on the ground floor, the engine room is reached from the railway siding platform. Its solid brick walls are white glaze tiled to height of 6 ft. 6 in. and it houses three twin vertical single-acting York compressors of bore 14 in., stroke 26 in., with a rated capacity of 85 tons each, and driven by 205 h.p. Swedish electric motors connected by 10 in. Reynolds chains to each compressor.

Space is divided adjacent to the railway siding for grading and packing rabbits, most of which are intended for export. Thousands of crates of rabbits are placed into the Municipal Cold Storage Works each year, frozen, and then stored until required to be delivered to a ship's side for transportation to overseas markets. Huge quantities of fruit pass through the works, and a diversity of other produce—fish, game, poultry, furs, tobacco, milk, butter etc., is also handled. A total of 250,000 packages is dealt with during the course of a year.

Storage charges are consonant with those generally obtaining in other city freezing works, the Council having no desire to undercut rates, relying entirely on the facilities provided and the service given for winning the necessary custom to make the works self-supporting.

The total storage capacity of the chambers is nearly 300,000 cubic feet, and the cost of the works, which were opened in 1914, was approximately £60,000.

THE SUCCESS OF YOUR MARKETING
DEPENDS ON YOUR AGENTS

BUHL & HACKING

(E. HACKING, prop.)

LICENSED FARM PRODUCE AGENT.

City Markets, Sydney

Will market your fruit to best advantage. Selected by Goulburn Valley
(Vic.) Growers.

TAS. & MELB. SHIPPING NO. 109.

Bankers: Bank of N.S.W.

Phone: M 3343.



A corner of the new Sydney Fruit Markets, just completed.

New City Market Covers $4\frac{1}{2}$ Acres

Cost £250,000, and Has More than 500 Stands

THE NEW SYDNEY Vegetable Market, which will be handed over to the Municipal Council of Sydney this month, has taken nearly twelve months to construct. This includes the time taken to clear the ground of stores, old houses, and an hotel, which were spread over most of the area.

The total value of the Market is in the vicinity of £250,000, or minus the land value, £150,000.

Abutting on four thoroughfares—Hay, Lackey, Harper and Little Pier streets—the market covers, under the one immense saw-tooth roof, four and a half acres of ground. It is the largest individual building of its kind in the Southern Hemisphere. There are no partitions, and a glimpse into the interior is rewarded by a vista of acres of concrete flooring, protected from the elements by an immense corrugated fibro-cement roof.

Apart from fittings in the administrative and recreation sections, there is no timber in the Market. Even the selling branches are concrete, on brick supports. The vehicular roadways have a coat of bitumen.

Approximately 700 tons of steel were utilised. The roof girders are supported by eighty 9 in. x 7 in. steel stanchions embedded in concrete. The floor area is 190,000 sq. ft.

Three blocks of concrete overhead offices and other administrative quarters appear almost puny in size compared with the vastness of the ground area. Yet they embrace an almost infinite variety of purposes. There are offices for Council officials and attendants, store rooms, a restaurant complete with kitchen, pantry, serveries, etc., and even several rooms for the police — just in case some of "the

500 Stands.

Contrary to an earlier belief entertained by sections of tenants in the old Markets, the new building is to be devoted entirely to vegetable growers. No agents will be allotted any space.

Provision has been made for 506 stands, to be let at varying rentals, according to position, and ranging from 2/- to 3/- per day each. The allocation and re-arrangement of the stands has been determined by a Council sub-committee.

Hours of Opening.

When the new Markets are ready, both the fruit and vegetable sections in the whole of the markets area will be opened at 7 a.m. Hitherto, the vegetable portion has opened at 6 a.m., and the fruit section one hour later, and some interests urged the retention of these hours, while others suggested 6.30 a.m.

This uniform opening hour was eventually recommended to the Finance Committee of the Council by the sub-committee, after members of the last-named had conferred with different sections of producers and others using the markets. It will operate for a trial period of six months.

Spacious, airy and cool, the new Markets fill a much needed want. They will obviate numbers of growers having to dispose of their produce under most unhygienic conditions in the open street.

The contractors for the work were Lipscomb and Price Pty. Ltd., Sydney.

Queen Victoria Building

Ornate Markets Cost Quarter of a Million

TO THE YOUNGER generation of Sydney residents, the history of the imposing pile of ornate buildings in George and York streets, now known as the Victoria Building, and fronted by retail stores, is more or less shrouded in mystery. Yet for many years the structure was the central metropolitan market.

In or about 1831, according to "Vade Mecum," the Council Year Book, and some eleven years prior to the incorporation of Sydney, the old Market Buildings, occupying the present site, were built by the Government, under the direct authority of Governor Bourke. It was about this time that the importation of mechanics by Dr. Lang took place, and these men were set to work on the erection of the structure.

The Markets were constructed in four distinct sections, for use as follows:—One for butchers' meat and poultry, one for the retail fruit trade, one for the wholesale fruit trade, and one for the sale of Potatoes. In November, 1846, the land and buildings were handed over to the Corporation. In 1859, the four sections were united by the construction of a central roof at a cost of £10,000 or £12,000, and formed the markets familiar to the citizens up to 1891.

The old George-street Markets outlived their usefulness, and the work of demolishing this relic of early Sydney was, owing to the efforts of the Mayor, Alderman Sydney Burdekin, commenced in 1891, although not without strong opposition.

The demolition of the old Police Court in George, York and Druitt streets, enabled the Council to pur-

chase this land from the Government for £124,000, thus acquiring the whole block bounded by George, York, Market and Druitt streets, and by somewhat decreasing the width and length of the site, the three first-named thoroughfares were considerably widened.

The work of constructing the new City Markets was commenced in 1893, and the foundation stone at the south-western angle of the superstructure was laid by the then Mayor, Alderman Sir William Manning, on December 8 of that year. The huge pile was finally completed and opened in July, 1898.

This building was constructed and completed under thirteen contracts at a total cost of £261,102. Its total length is 611 ft., and the average width about 93 ft. The building consists of a basement over the whole length, and three storeys. A dome 62 ft. in diameter, and rising to a height of 196 ft. dominates the structure.

Since the removal of the city markets to the Haymarket end of the city, the Queen Victoria Building has been put to other commercial and civic uses. The southern half of the structure, including the basement, now houses the Electricity Undertaking controlled by the Sydney County Council. A big winemaking company utilises the northern basement, and also has its main offices on the ground floor, the two storeys immediately above at the northern end being occupied by the Municipal Library. Numerous shops, occupied for a variety of retailing purposes, front the length of the building in George, Druitt, and a portion of York streets.

Established 1901.

Phone: MA 3826.

GROWERS—Consign your FRUIT AND VEGETABLES to

F. G. Stevens & Sons

LICENSED FARM PRODUCE AGENTS.

Head Office: 3 Quay Street, Sydney

Sales Personally Supervised.

Prompt Advice and Returns.

SHIPPING NO. 127.

For Service and Satisfaction

CONSIGN YOUR FRUIT TO—

J. J. MASON

LICENSED FARM PRODUCE AGENT

City Markets, Sydney

SHIPPING NUMBERS . . . Vic., N.S.W., Q'land, 133; Tasmania, 185.

Phone: MA 2605.



Interior view of the old City Fruit Markets, showing congestion of stands.

NEW MARKETS WILL RELIEVE CONGESTION.

Many years of agitation by fruit-growers, agents and others concerned have resulted in the erection of the new fruit markets. The Sydney markets have always been recognised by other States as an important market for their fruits.

Owing to the congested state of the markets it has not been possible for

Sydney fruit salesmen to give adequate displays of the products handled by them. The illustration shown above gives some idea of the congestion that occurred in the interior portion of the market. In many cases stands of the various agents overlapped and when large quantities of fruit arrived it was impossible for buyers or salesmen to move about with any degree of comfort. The closing of the N.S.W. Fruit Exchange some years ago fur-

ther accentuated this trouble.

With the growth of road transport, parking of motor trucks and other conveyances around the market became a problem and the lower picture on this page gives some idea of the congestion which occurred in this respect.

In many cases it was impossible for buyers and agents to load and unload fruit on to waggons due to the lack of parking space. This resulted

MR. WILLIS WILLIAMS.

Mr. Willis J. Williams, B.Sc., Superintendent of the Sydney Municipal Markets, has had charge of the Markets and Cold Storage Works of the City Council for over 20 years. He was appointed to this position after experience as accounts manager of the Adelaide Cold Storage Works. It was Mr. Williams who thought out the scheme for improvements at the Municipal Markets which have been carried out at a cost of £500,000.

He holds the title of Commissioner of International Institut au Froid (International Institute of Cold Storage, Paris). He was nominated for this title in connection with his work on



Exterior view of portion of the old City Fruit Markets, showing traffic congestion in front of Agents selling floors.

GROWERS . . .

CONSIGN YOUR FRUIT TO—

JAMES SLATER 21 CITY MARKETS, SYDNEY

POSTAL ADDRESS: BOX 36, HAYMARKET P.O., SYDNEY.
Established 1882.

SHIPPING NO. 19. 88, VICTORIA AND TASMANIA.
Stencils, Advice Notes, etc., on Application.

N. & A. FRUIT and PRODUCE COMPANY

Licensed Farm Produce Agents. (No. 2253)

HEAD OFFICE: 2 STEEL STREET, NEWCASTLE. BRANCH: 6 CITY MARKETS, SYDNEY.

References: Bank of New South Wales.

Shipping Numbers on Application. Telegraphic Address: "NANDA."
PHONES: Newcastle—1365. Sydney—MA 8428.

We Want Your Business—In Return, We Offer Good and Prompt Service.

W. E. BROMLEY

Licensed Farm Produce Agent
City Markets - - - Sydney

Established 25 Years.
SELECTED AGENT FOR BANANA BOARD.

Returns Sent as Soon as Fruit is Sold.
SHIPPING NO. 245.

A. J. COOPER

Fruit Merchant — Exporter & Importer
Licensed Farm Produce Agent

2 CITY MARKETS, QUAY ST., SYDNEY

Branch at New Markets. Established 1892.
Packing Material Stocked. Wrapping Paper, Strawboard, etc.
Prices on Application.
Cable and Telegraphic Address: "Fruit," Sydney. Shipping No. 51.
Bankers: Bank of New South Wales.
CONSIGNMENTS AND CORRESPONDENCE INVITED.

Fruit Prices in the Sydney Market

Survey of Operations for the Period January 25 to February 25, 1938

(By L. T. Pearce, Market Representative, Fruit Growers' Federation of N.S.W.)

THE PAST FOUR WEEKS have seen increasing quantities of fruit marketed from the more distant parts of the State, where climatic conditions decree that the season is a later one than Coastal and Metropolitan Districts. That the season throughout the State is about two weeks earlier than usual has received further confirmation from these later districts, and already the rush of late Plums from the Orange district appears to be past its peak. Stone fruit, in fact, all already appear insignificant in quantity as compared with the rush (much too sudden) of Apples of medium and small size that are reaching the market.

It was with something of a shock that the Sydney trade received the news that Tasmania was forwarding 13,000 bushels of Apples on February 15, but the advanced color, good size, and freedom from Codling Moth that this shipment displayed provided sufficient reasons for its ready sale, while the N.S.W. fruit unfit for export was comparatively neglected. Still greater arrivals of N.S.W. Apples are creating a space problem for a number of agents, and extra stands have, in some instances, been taken, while in some cases bargain prices have been accepted rather than allow the fruit to accumulate.

The progression of the season is also observed in that Irrigation Area and Western District Grapes are taking the place of the local product. These latter have not been in excessive supply, and their size was outstanding compared with the majority of other arrivals whose development had been hampered by dry weather conditions. Prices also reflected favorably to the locally grown product, and, unfortunately, many sales of Western Grapes were necessary at the unprofitable price of 2/- or 3/-. Early consignments of Purple Cornichon from the Murrumbidgee Irrigation Area have appeared and these are likely to experience an earlier demand than usual, due to the comparative smallness of other arrivals.

The Peach market lost its zest, as arrivals became almost exclusively fruit that was too small for canning purposes, or had been grown under the dry conditions that befel the Bathurst District this year. Vic-

torian arrivals had lessened until the Lady Palmerston became due, and then it is probable that medium to large sizes experienced a better demand than most locals. With the exception of over-ripe consignments, Victorian Peaches have experienced considerably less wastage this year than is customary, and 7/- to 9/- per bushel has probably been an average return. The M.I.A. Peaches in season have mostly been of good keeping quality, which was fortunate, as there was a superabundance of small sizes on most occasions.

Cannery requirements reduced the open market supply of Williams Pears and Vic. practically ceased to forward by the middle of February. A number of N.S.W. districts apparently also sold quantities for canning, the price on the orchard being too good and sure to warrant risking the fresh fruit market. Something approaching a collapse in values was experienced during the middle of the month owing to the advanced maturity of most fruit, and agents were seeking buyers to clear stocks

if possible, the prices asked being very tempting. Buyers, however, had also been caught with their own stocks, and their demands were almost exclusively for green fruit early in the week, and slightly colored fruit later in the week. At present, sellers once more have the upper hand, and green Williams have improved to around 8/-, with large and choice quality still higher.

With considerable truth, however, it must be said that the Williams Pear season is not what it used to be, and the question arises in one's mind as to how long the fresh fruit eating public will continue to accept the culls from canning.

With very little diminution, Valencia Oranges continue to arrive, and even if they are chiefly second crop, and many are thick in the skin, and some flavorless—they mostly appear to be wanted. Agents have been busy reconditioning the worst quality forwarded, and where discretion had not been shown by the grower, debit account sales must have been received. As main crop fruit of outstanding quality became still more scarce, values improved, and selected counts of 163 and 180 had preference. The middle of the month saw up to 15/- per bushel recorded, and it is probable that this level will attract such supplies as still remain to be marketed.

Export to New Zealand continued from the M.I.A., but it was observed that requirements were on a much smaller scale than earlier in the crop season, the total for January being only 3,366 export cases.

Considerable interest is being maintained by coastal citrus growers, in the trade negotiations with the Dominion, and hopes are entertained that the satisfactory inspection of Mandarins and Oranges prior to the embargo in 1932 will provide sufficient reason for the admission of those fruits to New Zealand throughout the forthcoming season.

Lemons have been scarce, and other States have apparently been similarly placed, as arrivals from Victoria and S. Australia have been very light, and Queensland has just come on the market with "Benyenda" brand. This scarcity of choice quality fruit has been a boon to the grower of indifferent quality fruit who had a few cases, out of season, and almost any quality has sold satisfactorily. Some of the locally grown cured fruit has been too large to realise top market value.

Tropical fruits available were confined to Bananas and Pineapples, as Papaws and Mangoes finished for the season.

Some difficulty was experienced in preventing Bananas becoming too ripe, and some sales were made at times to prevent wastage.



Interior view of the new Sydney Fruit Markets, just before completion.

Established 1896

H. BLACK & SON
LICENCED FARM PRODUCE AGENTS,
17 CITY MARKETS, SYDNEY

Consignments of Fruit, Tomatoes, etc., Received for Sale
Cash and Account Sales Weekly.

Bankers: Bank of N.S.W.

PHONE: MA 4482.

Growers!

Consign to—

**SILK BROS.
PTY. LTD.**

INTERSTATE TRADERS

Municipal Markets Sydney

ALSO AT MELBOURNE AND ADELAIDE.

The largest specialisers in the Commonwealth of all varieties of Fruit and Vegetables. For 25 years we have stood the test of time and still going strong. All sales are under supervision of principals and we are noted for our prompt returns and advices. Any information regarding prices and prospects, etc., may be had by writing any of the above addresses.

CONSIGN YOUR FRUIT TO—

LIONEL T. LOCKE
Licensed Farm Produce Agent
City Fruit Markets, SYDNEY

It will be handled by thoroughly experienced and expert salesmen.

Registered, Telegraphic Address: LIONELOCKE, SYDNEY.
Bankers: Bank of New South Wales. Fidelity Bond £1,000.
SHIPPING NO. - 38 N.S.W. & QLD. 148 ALL OTHER STATES.
Stencils and Advice Notes on Application.

Forwarding Nos.

SYDNEY 37, FOR TAS. SHIPPERS 167, MELB. 39, ADELAIDE 16.

FRUIT PRICES IN THE SYDNEY MARKET—(Continued).

Pineapples endured a period when water blister was prevalent, values being affected in consequence.

Export of Apples is now engaging the attention of pome fruit growers and shippers and already shipments have left for the United Kingdom. The inadequacy of shipping space early in March and the inclusion of the slow moving "Somerset" amongst the boats, have occasioned some representations to the Shipping Authorities, but little hope is entertained for increased space.

Present Prices are as follows:

Apples: Fancy and Good—N.S.W. Colored, Grav., 3/- to 7/-; King David, 3/- to 5/-; Fanny, 3/- to 6/6; McIn-

tosh Red, 3/- to 7/6; Jon., 3/- to 8/-; others 2/- to 5/- per bushel. Cooking Apples: Granny, 3/- to 6/6, few 7/-; Cleo., 3/- to 6/-; London, 2/6 to 5/6; others 2/- to 5/- per bushel. Tasmanian: Alex., 3/6 to 5/6; Worcester 4/- to 6/-; Grav., 4/- to 7/-; Alf., 3/- to 5/- per bushel. Extra Fancy higher.

Pears: Williams (V.), 6/- to 8/-, few 9/-; N.S.W., 6/- to 8/-, few large 9/-; Howell (N.S.W.), 4/- to 6/- per bushel. Extra Fancy higher.

Bananas: N.S.W. and Q'land. Prices according to the Banana Marketing Board of N.S.W. Regulation graded, first quality fruit. Six, seven, eight and nine inch fruit, 7/- to 14/- per



GROUP OF SYDNEY FRUIT MERCHANTS

Taken in 1905 at Correy's Gardens and Pleasure Grounds on the Parramatta River, near Concord, N.S.W. The site of the old pleasure grounds is now covered by private residences. The majority of the Agents in the picture have passed away, but there are a few who still carry on business at the present Sydney Municipal Markets, namely, F. Chilton, F. G. Stevens, A. J. Cooper, E. Mitchell. The picture, kindly lent to us by Mr. Alfred Slater, was taken at an annual picnic and in the group are (reading from the front row)—A. J. Cooper (sitting), W. H. Southcott, J. C. Campbell (Minister for Agriculture), T. J. Jessop, Jas. Slater, W. H. McKeown, John Barrett, R. Alderson, E. Chudley, H. Robards, W. Donald, Ben. Isaacs, Fred Chilton, J. Firth, H. G. Rogers, J. H. Trearthen, Syd. Howell, T. Musgrave, E. Mitchell, F. G. Stevens, W. Barrett, Don Cato, L. L. Earl, H. Griffiths, and A. Chave.

JOSHUA TERREY

Licensed Farm Produce Agent

CITY MARKETS, SYDNEY

SHIPPING NO. 70.

Personal Attention to Every Consignment. A Life Knowledge of Fruit, and Established in the Agency Business since 1899.

ACCOUNT SALES PROMPTLY.

Shipping No. 195. Established 45 Years. Phone: MA 3870.

A. H. Walker & Son

Fruit Merchants and Licensed Farm Produce Agents

CITY MARKETS (No. 1 and 2 Markets) SYDNEY

SPECIALISTS IN ALL FRESH FRUITS.

Selected Agents for—

Southern Pear Packing Co., Moon Brand, Victoria. Golden Girdle Packing House, The Summit, Queensland. Tamar Valley Co-operative Packing Houses, Tasmania. Selling Agent for N.S. Wales, Tasmanian, South Australian, West Australian and Queensland Fruits.

Banks: E.S. & A. Ltd., Haymarket, Sydney; Commonwealth Bank of Aus.

W. O. WOODS

LICENSED FARM PRODUCE AGENT

Municipal Markets, Sydney

Also at Bathurst.

Head Office: Cnr. THOMAS STREET & ULTIMO ROAD, SYDNEY. Bathurst Office: 64 GEORGE STREET, BATHURST

Specialising in PEAS, BEANS, CAULIFLOWERS and CABBAGES. Will accept consignments of all vegetables. Account Sales Returns same day

INTERSTATE SHIPPING NO. 333.

PHONES: Sydney—UM 6158. Bathurst—627.

Service with Integrity . . .

H. P. WOODWARD

Licensed Farm Produce Agent

CITY MARKETS . . . SYDNEY

SHIPPING NO. 281.

Telegraphic Address: "Woodward."

References: Bank of N.S.W.

Code: Bentleys.

Phones: MA 2612 and X 2317.

Producers Co-operative Distributing Society

LICENSED FARM PRODUCE AGENTS

Municipal Fruit Markets . . . Sydney

Fruit Exported to United Kingdom and Europe.

For Information—APPLY BOX 86 C, P.O., HAYMARKET, SYDNEY.

All Orchard Requirements at Lowest Rates, including Cutler Fruit Graders and Brown's Fruit Graders.

tropical case. Fully colored and overripe lower, specially selected country order fruit higher.

Citrus Fruits.

Grapefruit: Cal., 35/- per Cal. case.

Lemons: N.S.W. Special and Standard—Local, counts 80 to 113, 5/- to

7/- per bushel; counts 125 to 150, 7/- to 10/- per bushel; cured, to 14/-; plain grade, 3/6 to 8/- per bushel.

Inland: 10/- to 16/- per bushel; cured, 8/- to 16/- per bushel. S. Aust. and Vic.: 9/- to 16/- per bushel. Queensland: to 20/- per bushel.

Valencias: N.S.W.—Local, standard, 7/- to 12/-; plain, 4/- to 8/- per bushel; second crop, 2/- to 5/-, few to 8/-; inferior unsaleable, per bushel.

Inland: 9/- to 14/-, few higher per bushel, two bushel crates (large sizes), 12/- to 14/-.

Figs: N.S.W.—2/- to 4/6 per quarter bushel.

Grapes: N.S.W.—Inland, Purple Cornichon, 5/- to 6/-; Waltham Cross, 4/- to 6/-; Black Muscat, 4/- to 6/-; Gordo, 5/- to 7/- per half bushel.

Local: Black Muscat 6/- to 8/-, few higher; Black Hamburg, 3/6 to 5/6 per half bushel; White Muscat, 8/-

to 10/-, few 12/-; White Sherry, 4/- to 5/6 per half bushel. Inferior in all types lower.

Melons: N.S.W.—Inland: Californian Cremes, 6/- to 7/-; colored, to 9/-; Hale's Best, 6/- to 11/-; Honeydews, 6/- to 9/-, few higher in all types per tropical case.

Nectarines: N.S.W.—Inland: 7/- to 10/-, small, from 3/- per half bushel.

Peaches: N.S.W.—Inland: 2/- to 4/-; J. H. Hale's, 4/- to 6/-, few 8/-; per half bushel, others 4/- to 7/- per bushel. Vic.: 4/- to 7/-, few to 9/- per bushel.

Plums: N.S.W.—Inland: 4/- to 6/-, small from 1/6, inferior unsaleable, per half case.

Passion Fruit: N.S.W.—8/- to 11/-, inferior from 2/- per half bushel.

Pineapples: Q'land.—7/- to 10/- per tropical case.

Quinces: N.S.W. and Vic.—3/- to 6/-, few 8/- per bushel.

Strawberries: N.S.W.—4/- to 12/- per dozen punnets.

Tomatoes: N.S.W.—6/- to 10/-, special to 14/- per half bushel. Q'land: 4/- to 9/- per half bushel; Vic.: Portland, 10/- to 24/- per bushel.

MR. JOSHUA TERREY.

The G.O.M. of Sydney Fruit Merchants, Mr. Terrey, will be 80 years of age next June, and is still actively engaged in business at the City Fruit Market. He was born on his father's orchard, "Rosedale," at Pymble, and at the age of 20 controlled the marketing of the products of the orchard



Links. Stately homes occupy most of the surrounding country, homes famous for their beautiful gardens. Good citrus was grown at Pymble in the early days, and it was from "Rosedale" that an exhibit of Oranges was selected for the 1880 Melbourne International Exhibition.

These Oranges were of the Parramatta variety, and were selected by the late W. H. McKeown, an expert of fruit in those days, who also had orchard property at Pymble. He was the owner of the original orchard of the late Richard Hill, one of the early pioneers.

Joshua Terrey went into the business of growers' agent in 1899, and being known to many growers, soon established a big list of clients. Having had experience as a grower as well as an agent, he expresses the opinion that the agent has to put up with just as many problems as the grower. Poor quality fruit is the bugbear of the agent. Some growers, said Mr. Terrey, expect a paying price for fly-infested fruit which buyers will not take at any price. Fruit is often received that is not fit for sale, and it is the agent that has to take the rebuffs handed out by the retailers. The licensed agents are an honorable section of the fruit trade, and have a lot to contend with one way and another. Contentment in the trade will only be found when there is complete confidence between grower and agent.

N.S.W. Fruit Industry Enquiry

INTERESTING EVIDENCE continues to be given before the N.S.W. Fruit Industry Enquiry Commissioner, Mr. J. E. McCulloch.

Mr. Arthur A. Wilkinson, owner of orchards at Uralla, Methven Park, and Pomona, estimated the value of his properties as varying between £30 and £50 per acre, the average yield for Apples and Pears being 1½ bushels per tree, and 1½ bushels of Cherries. To cover production costs it was necessary to obtain 4/- per case for Cherries, 5/- for Apples, and 6/- for other stone fruits. Although local markets gave the better results, he considered it advisable to export in heavy years.

Visit To Kentucky.

Mr. Frederick J. Croft, Kentucky, had several suggestions to make as a result of his studies abroad. These included one label for Australia; two export grades, "extra fancy" and "fancy"; inspection at district sheds of export fruit; the adoption of gas storage of fruit; improvement in packing. London handling of fruit seemed quite satisfactory. N.S.W. fruit compared favorably with that of Tasmania and Victoria.

In Ontario (Canada), continued Mr. Croft, trees were reported to yield 18 to 21 bushels; he had seen a tree carrying 14 bushels. Trees were much larger than here, some growers pruning lightly, and some not at all.

Mr. Frederick Adamson, a fruit-grower for 35 years, claimed to have made more from half a crop ten years ago than a full one now. Since 1930 values had dropped on a average of 3/- per case, but he had hopes that the boron treatment of internal cork in Apples would be the means of determining between success and failure on the settlement.

Mr. Robert C. Adamson was another grower who considered that the use of boron had apparently eliminated internal cork. Although expecting his orchard to bear after five years, it had taken about ten to do so, the average production for both Apples and Pears being about 2½ bushels. His 25 acres yielded a living, and he had received as many as 10 to 12 canvassers in one season.

Fruitgrowing at Orange.

Mr. George Hawke, Canobolas, gave

the profitable age of Apple trees as seven to eight years, six to seven for Pears, ten for Cherries, five for Plums, and three for Grapes. The maximum area one man could manage with casual labor was 12 acres, considerable casual labor being necessary for Cherry and Plum picking. Difficulties which growers had to contend with at present were Brown Rot; Codling Moth (for which six to eight sprayings were necessary); hail visitations; decrease in price owing to increase in volume, and higher production prices, it being necessary to use clean secondhand cases in lieu of new ones. There was a necessity for packing instructors, and fewer Sydney agents; the formation of a Commission to administer the Sydney markets was recommended.

In answer to Mr. Herrod (Fruit-growers' Federation), Mr. Hawke stated he considered that some form of grower controlled organisation was necessary. The Orange district was very well organised, railway transport being recommended.

Mr. W. B. Pascoe, Canobolas, aimed to make 1/- a case on his Apples. Soil erosion was one of his biggest problems. Having no substantial turnover, men with small concerns had no chance nowadays.

Mr. W. J. I. Nancarrow, Nashdale, considered that a rise of 6d. or 1/- per case would alter the outlook for the industry. He gave the bearing age of Apple trees as seven to nine years and Pears nine years. Granny Smith yielded approximately three cases per tree. Market prices since 1930 had been considerably depressed, and owing to the increased efforts of Tasmania, many growers had to seek aid from the Farmers' Relief Act. Thrips were a very active pest. The system of marketing in Sydney had given him satisfaction, although on one occasion he received top price for half a consignment from one agent, and 4/- less from another agent for the remainder. Loading conditions at Darling Harbour could be improved. The Railways rendered excellent service and he had always used them for transport. He considered that the Orchard Tax should be continued.

MR. A. J. COOPER.

MR. A. J. COOPER, who is one of the pioneers of the selling side of the fruit industry, first commenced business as a fruit agent in 1893 in the old Fruit Exchange Building. He was later joined by his brother, Mr. E. A. Cooper, who continued with him for a number of years, but was finally compelled to retire owing to ill health. Mr. E. A. Cooper was the founder of the fruit section of the Chamber of Commerce.

During this period the firm branched out into the importation of Italian and Spanish citrus fruits, in which a large business was built up. When the embargo was placed on the importation of Italian fruits, Mr. Cooper decided to specialise in the consignment side of the business, and this policy has been followed ever since.

In 1923, he was joined by his eldest son, Mr. A. C. Cooper, who after a thorough training took over the management of the business, whilst his father left on a world tour.

During the ten months Mr. Cooper, Sr., was away, he made an extensive study of overseas fruit selling and cool storage methods, visiting every major market in England, the Continent, and America. Much valuable data was gathered and on his return this was placed at the disposal of his many clients.

In 1937, owing to ill health, Mr. Cooper retired, leaving the management to his two sons, Messrs. A. C. and E. W. Cooper, who now control the business.

Mr. Cooper, Sr., has been, and is, one of the most prominent and best-known men in the public life of the trade. He has been a keen worker for the betterment of trade conditions generally, and a fearless speaker. Many benefits that the trade now enjoys have been due to his untiring efforts.

During his long association with the fruit industry, Mr. Cooper has held many prominent positions. In 1923-24 he was chairman of the fruit section of the Chamber of Commerce, and in the same year chairman of the Fruit Merchant's Association. He was also a member of the Tasmanian Associated Selected Agents and held the position of President of this Association over a period of ten years.

Mr. Cooper is also a recognised cool storage expert and was the first to cool store fruit on a commercial basis. This venture, which proved an outstanding success, was undertaken in Hobart, the fruit being stored in the old Markets there, which were converted to cool stores. Mr. Cooper has continued his interest in fruit storage, and is now retained by the Sydney Cold Stores Ltd. as fruit storage adviser.

Murrumbidgee Irrigation Areas

(By Our Correspondent.)

THE WEATHER during the month has been hot and sultry, but it has proved a fine drying season for those growing Sultanas, and a very fine sample has been turned out.

Many growers favor the Johnson dip, while others, with previous season in mind, prefer the quicker caustic soda, or the caustic soda potash dip, with the modified tem-

perature.

cess in growing exceptionally fine citrus on very heavy soil, some acres of his farm had come under the classification of being unfit for horticulture, yet the evidence of his trees is proof that constant attention to all the important details of cultivation has given a result far beyond the general expectation.

Questioned by the Commissioner as to his estimate of the life of citrus trees on the M.I. Area, Mr. Ward stated that it would probably be only 18 years, mostly on account of the ineptitude of growers, and soil conditions, as everything depended on the condition of the land and the efficiency of the growers concerned.

If these conditions were observed, then there was no reason to think that citrus trees would not last for 50 years.

Mr. Ward stated that no fertiliser was required up to the 12th year of the trees if working and cultivation conditions were good.

In the earlier years of his tree's life, cover crops were grown, but the practice had been abandoned, and he considered it was not essential to the health and development of the tree.

From three to five tons of sheep manure per acre was preferable to growing green crops, in his opinion, although he allowed voluntary green growth to develop among his trees, ploughing it in during the Winter months.

Mr. Ward packs all his own fruit, and consigns it to agents. Spraying for Red Scale, Mr. Ward did not consider a sound proposition for very large trees, owing to the quantity of spray required at least a gallon of spray for per foot of the height of the tree, and he was in favor of the "Pot" method of fumigation, which he always practised.

The Royal Commission of enquiry into the fruit industry commenced on Monday, 21st inst., under Mr. McCulloch, and with him sat Mr. G. C. Savage, Director of Fruit Culture, in an advisory capacity.

Mr. E. Herrod, representing the Fruit-growers' Federation of N.S.W., also attended the Court in the interests of his members, while Mr. K. H. Todd, President of the Returned Soldiers' League, watched the interests of the Soldier Settlers, by permission of the Commissioner.

Mr. J. E. Ward, of Yoogali, who owns the largest plantation of citrus on the M.I.A., gave evidence as to the prices he had obtained during several years, and expressed his opinion that citrus growing was a "Bonanza" if the farm was well planted with selected trees, on good stock, and thorough attention to every phase of cultural practices was adopted.

The trees must be thoroughly cultivated and well fed, and kept free from insect pests, otherwise the product could not command the highest price on the market.

Mr. Ward, whose property is 11½ acres in extent, has proved his suc-

cess in growing exceptionally fine citrus on very heavy soil, some acres of his farm had come under the classification of being unfit for horticulture, yet the evidence of his trees is proof that constant attention to all the important details of cultivation has given a result far beyond the general expectation.

Mr. Ward considered that it took a three bushel crop per tree to cover expenses and a five bushel crop per tree was a good payable return on outlay. Groves returning two cases or less per tree were definitely unprofitable in his opinion, and were not worth assisting as an industry.

He also strenuously objected to the Orchard Tax for various reasons. He considered that the acreage one man could effectively work was 12 acres.

Mr. Ward quoted a great many figures of his actual returns, which in comparison with those quoted by other growers certainly showed a far better return than that obtained by the general run of growers.

Mr. G. Smailes, one of the best growers in the Ballingall section of the Mirrool Area, gave accurate figures of his actual returns from citrus for seven years, the prices quoted being the nett return per 100 lbs.

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Murrumbidgee Irrigation Areas—(Continued).

of Oranges, received from the packing shed.

Washington Navel.

Year.	Grade	Grade	Grade
1930	1	2	3
1931	7/2	5/3	3/3
1932	5/5	4/4	4/-
1933	6/6	5/2	3/8
1934	5/10	4/10	3/7
1935	4/7	3/6	2/6
1936	8/6	6/6	4/6
1937	7/6	5/6	3/6
	10/-	8/-	6/-

Valencias.

Year.	Grade	Grade	Grade
1930	1	2	3
1931	9/-	6/9	4/-
1932	9/7	7/4	5/6
1933	7/7	5/6	1/8
1934	7/1½	5/1½	2/9½
1935	5/-	4/-	3/-
	11/6	9/-	6/-

Other prominent growers who gave evidence were Mr. P. C. Cox, whose careful records of the costs of spraying for the control of Codling Moth were both interesting and instructive. Mr. Cox stated that with careful attention to the examination of

bandages, and a thorough Winter clean up, combined with the sprayings as outlined by him, that an almost complete control of the Codling Moth was assured. Mr. Cox's crop of Pears this season is an outstanding example of his thoroughness.

Mr. Cox stated that he preferred the hessian bandage to the chemical one, for several reasons, which he stated.

Mr. R. Mallinson, general manager of the Griffith Producers' Co-operative Company, who is also a grower himself, gave evidence on the activities of his Company, and the progress made during past years. Since the last general meeting of the company, the share capital had been greatly increased, thus showing the confidence of the growers in the present management.

Further evidence was given "in camera" by Mr. Mallinson.

Mr. S. Braithwaite, an Inspector of the Rural Bank, and at one time manager of the Water Commission Nurseries at Griffith, gave evidence as to the supply of trees during the

earlier days of the settlement, and in his present capacity dealt with the position of those growers who came under his supervision.

During his evidence, Mr. Braithwaite paid a tribute to Mr. W. J. Allen, formerly Fruit Expert of this State, for his foresight in introducing the "Trevatt" Apricot to this area. The bulk of all Apricot plantings on the M.I.A. were of this variety, and this type of fruit had proved to be a splendid canner. Moorpark Apricots did not do well on the Area.

(The Trevatt Apricot originated in Mildura, from a chance seedling of the Blenheim variety, growing on the farm of the late Charles Trevatt on the Crescent, Mildura, and from this tree, which is still thriving at nearly 50 years of age, all the buds for the original stocks were taken, and the strain has continued when budded from the following generations of trees.)

Much evidence was given at the enquiry as to the length of life of various types of trees, growing on the Area, and it was generally admitted that this depended greatly on the original stock which was supplied, the drainage conditions, and the

methods of cultivation and irrigation adopted by individual growers, but such visitation as frosts and flooding through abnormal weather conditions had mitigated against the success of many settlers in some parts of the Area.

The Valencia crop on the Area is nearing a finish, and prices are now slightly better than in former seasons.

Approximately 24,000 cases have been exported to New Zealand.

The long dry spell of hot weather has been responsible for a decided decrease in the Red Scale pest, and most of the growers of citrus are determined to make the effort to eradicate the pest if possible while it is thus weakened. The large orders for fumigation placed by growers with the Griffith Producers Co. and other contractors is a sign that determined effort is being made to ensure an exceptionally clean crop of citrus fruits for the ensuing season.

The Producers' Company have four plants going at full speed when favorable weather conditions prevail.

NEW GRADER.

A new grading and sorting machine was recently demonstrated at the orchard of Mr. Enticknap, at Leeton. The machine is reported to be capable of putting through 60 cases of fruit per hour. It weighs 7 cwt., fitted with skids it can be transported about the orchard by a horse. Favorable comments were made as regards this invention, which will be handled by the Leeton Fruitgrowers' Co-op. Society.

N.S.W. CITRUS CROP PROSPECTS.

Valencias Heavier than Navel.

Over 3,000,000 Bushels of Oranges, Lemons, and Mandarins is Forecast.

CITRUS CROP PROSPECTS in N.S.W. are better this year than at this time last season, states the State Marketing Bureau of the N.S.W. Department of Agriculture. The forecast, which reveals conditions up to February 10, is as follows:

Generally profuse blossoming occurred, and, although subsequent shedding was heavy in some districts, the quantity of fruit remaining of most varieties appears to be greater than that in sight last season.

The outlook for Navel Oranges in coastal groves is brighter; at Gosford, where the previous crop was extremely light, a good deal of improvement is apparent. On Irrigation Areas settings range from fair to good and the fruit is growing satisfactorily.

The position with regard to Valencias is pleasing in most localities, and, compared with Navel, heavier crops are apparent. Fair quantities of intermediate fruit are also being carried in parts of the coastal citrus belt.

In a number of districts patchy settings of Common Oranges are noticeable although in the aggregate satisfactory yields should be obtained. Reports indicate that reduction in the numbers of trees of this variety continues.

Mandarins are also variable, and range from light to good.

It should be noted that the forecast refers to yields in sight at present. Any adverse conditions which may arise between now and completion of harvesting will, of course, be likely to affect production.

Forecast.

Oranges: Navel, 890,000 bushels; Valencias, 1,220,000 bushels; Sevilles, 33,000 bushels; Common and Others, 270,000 bushels; total, 2,413,000 bushels.

Mandarins: 390,000 bushels.

Lemons: 315,000 bushels.

Total: 3,118,000 bushels.

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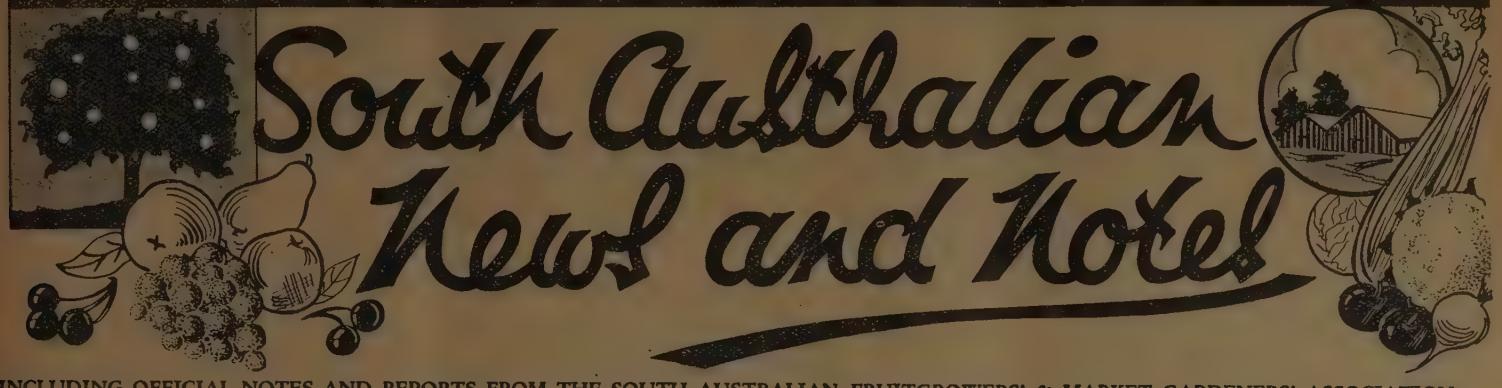
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South Australian News and Notes

INCLUDING OFFICIAL NOTES AND REPORTS FROM THE SOUTH AUSTRALIAN FRUITGROWERS' & MARKET GARDENERS' ASSOCIATION.

The South Australian Fruitgrowers' & Market Gardeners' Association

An Executive Meeting of the Above Association was Held, in the Board Room on Friday, February 25.

Present: Messrs. W. J. Bishop (chairman), A. C. Gibson, G. H. Parsons, F. G. Gill, W. H. Ind, A. Elliott, F. Hughes, R. Hunter, H. J. Walker, G. Jennings, L. J. Wicks, H. B. Robson, G. H. Schultz, H. H. Schultz, J. B. Randell, C. Ridley, H. J. Coulls, J. G. Potts, T. Playford, M.P., G. Strange, and Secretary (A. Stuart).

Apologies received from Messrs. N. T. Hobbs, C. Pitt, G. Pitt, C. W. and E. Giles and H. N. Wicks.

Correspondence: Correspondence received from Mr. T. Playford, M.P., containing evidence submitted to the Royal Commission on Transport.

Committee of Direction of Fruit Marketing, Queensland.

Sugar Concession Committee re Pears for canning and special export assistance.

Uraidla and Summertown H. & F. Society, asking financial assistance for its annual show.

McLaren Vale Fruit Packers Ltd.

Commissioner of Public Works' Office concerning release of water held up behind Torrens Gorge Weir.

Mr. C. Abbott, M.P., enclosing copy of letter received from Commissioner of Public Works re water supply for gardeners in Torrens Valley.

British Continental Press Ltd., London, re "Fruit Annual."

Australian Jam Co. Pty. Ltd. re export assistance, Mr. P. A. McBride, M.H.R., and Mrs. P. A. Patricious.

Circular from Blackwood branch of the Agricultural Bureau.

It was decided on the motion of Messrs. L. J. Wicks and H. Schultz, to subscribe to the "Fruit Annual."

Mr. F. Hughes moved, seconded Mr. R. Cramond: "That the action of the Secretary in forwarding donation to Uraidla Show be endorsed." Carried.

Grower Representatives on Committee to Fix Holiday Markets: Mr. G. H. Parsons reported that he had interviewed the Market Secretary (Mr. F. H. Edwards), and the matter would be placed before the Board.

Appreciation: Mr. G. H. Parsons moved "that a minute of appreciation be recorded for the fine work done by Mr. T. Playford, M.P., in submitting evidence before the Royal Commission on Transport on our behalf. Seconded Mr. A. Elliott and carried.

Reports from Section.

Mr. J. Turner reported on the Pool meeting held that morning. He brought forward a recommendation from the directors "that in view of present circumstances, the ability of several sections to handle surplus fruit, that the Board consider the Pool no longer necessary, and steps be taken to de-register."

After discussion on the matter, Mr. J. B. Randell moved "that the recom-

mendation be accepted." Seconded by Mr. G. H. Schultz.

Mr. G. H. Parsons moved as an amendment "that the matter be deferred until we get full particulars." Seconded Mr. A. Elliott. Amendment carried.

Mr. L. J. Wicks moved "that the matter be investigated during the coming month to see if Committees from any section can work through the Society to arrange finance." Seconded Mr. A. Elliott. Carried.

Celery Section: Mr. G. Strange reported that export to Brisbane and Sydney had started, and wonderful returns had resulted.

The crate position again causing concern, but the matter this year was receiving early attention.

Soft Fruits Section: Mr. F. Hughes reported on the activities of the Soft Fruit Section.

Prunes Bounty: Mr. H. B. Robson moved "that the Federal Ministers be communicated with soliciting the help in securing the bounty as last year." Seconded Mr. F. Hughes. Carried.

Secretary: Mr. T. Playford reported that the probationary period of the Secretary had elapsed and the sub-committee recommends to the executive "that Mr. A. Stuart be appointed permanently."

Mr. J. B. Randell moved, supported by Mr. H. B. Robson "that the recommendation be accepted." Carried.

Educational Meeting: Mr. R. Cramond moved "that the matter of Educational Evening be placed on agenda for next meeting." Seconded Mr. H. Schultz. Carried.

Interstate Markets: Mr. R. Cramond moved "that steps be taken to get regular market reports from all our representatives." Seconded Mr. W. Ind. Carried.

Mr. T. Playford gave a brief report on his evidence before the Transport Commission.

Social Club: The Secretary brought forward a suggestion to form a Social Club.

Mr. W. H. Ind moved "that suggestion be placed on agenda for next meeting."

Seconded Mr. R. Cramond. Carried.

Apple Export Prospects

Plea for Super Quality Pack.

Blackwood Orchard Field Day.

(Taken from the "Advertiser," February 12, 1938.)

A PLEA for South Australian Apple growers to put up a super pack of export fruit in the approaching season was made by the Chief Horticulturist (Mr. A. G. Strickland) at the annual field day of the Blackwood Experimental Orchard yesterday.

"The State is going to have a tremendous crop of excellent quality fruit, and growers need send nothing but the very best," said Mr. Strickland. "Prices, unfortunately, are low, but if the State sends a super pack to British and Continental markets, it will greatly assist forward sales for 1939. Standards required for the overseas markets are not stationary, and therefore better fruit is required than was the case five years ago."

"South Australia has a better pack on average than other States, but to stand up to the intense foreign competition which we have been getting and will get in future years, it should be improved and the aim should be not just to meet the minimum grading requirements, but exceed them as much as possible."

The season, he added, could not be more ideal for preparing a super pack, as crops were big, free of blemishes and of better color than for many years. "We have the goods, and the pack must be so good that overseas buyers will come back for more," he said.

Maturity would have to be carefully watched, continued Mr. Strickland. The season was three weeks ahead for normal, and Jonathans and Cleos, nearly ready for picking. Over-maturity might occur in Pears, where it was the main cause for rejection for export. On no account should fruit from light crop trees be picked for export, as such Apples were much more subject to bitter pit and other storage faults than fruit from normal to heavy crop trees. Handling should be very careful, as bruising of fruit was not uncommon. Color this season would be very important, as red varieties were showing excellent color, and there should be no difficulty in

NOTICE OF MEETING.

Celery Section.

The annual general meeting of the Celery Section will be held in the Board Room on Monday, March 14, at 8 p.m.

Business:

Presentation of Financial Statement.

Receive the reports of Messrs. C. W. McRostie (Melbourne Representative), and D. G. Wills (Sydney Representative).

Report on Crate position. General discussion on forthcoming season.

As Messrs C. W. McRostie and D. G. Wills will both be present, all members are particularly urged to attend.

G. STRANGE, A. STUART, (Chairman) (Secretary)

NOTICE OF MEETING.

Tomato Section.

A general meeting of Tomato growers will be held in the Board Room, Rundle-street, on Thursday, March 17, at 8 p.m., when the Melbourne Representative, Mr. C. W. McRostie, will address the meeting.

All Tomato Growers are urgently requested to attend.

F. GILL, A. STUART, (Chairman) (Secretary)

NOTICE OF MEETING.

Marion Branch.

A special general meeting of the above Branch is called for Wednesday, March 23, at 8 p.m., when the Melbourne Representative (Mr. C. W. McRostie) and the Sydney Representative (Mr. D. G. Wills) will be present to address the meeting.

Tomato growers are particularly requested to attend.

A. C. GIBSON (Secretary)

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OBITUARY

Len Cowell Passes

The death occurred at the end of February of Mr. Len J. Cowell as a result of a motor accident. His passing was a shock to his friends, of which he had a great number. For a number of years after his return from the Great War Mr. Cowell was engaged in growing glasshouse Tomatoes at Lockleys. He was not engaged in the industry very long before he took an interest in the affairs of the Association. His fellow growers were not very long in taking advantage of his business ability, for he was not only promptly elected to the Committee but in a brief time he was elected Chairman. During Mr. Cowell's occupancy of the chair the industry passed through troublesome times, and the growers were indeed fortunate in having such a man in charge of affairs. Much credit is due to his strong personality, vigor and acumen for keeping the Section together during a period of much stress, and for ensuring a steady and successful advancement.

Unanimous regret was voiced by growers when Mr. Cowell gave up Tomato growing and, of course, the Chairmanship, because of ill-health. Apart from business Mr. Cowell possessed personal charm.

far exceeding the minimum grading requirements in regard to the amount of color on the fruit. Under the regulations a proportion of blemish was allowed, but with so much sound fruit available, no blemished Apples should be included.

Crown Pack Recommended.

"The crown pack will help to get the weight of fruit into the case that buyers desire, and at the same time have a minimum of bruising," said Mr. Strickland. "Tasmania used this pack with much success last season, and there will be ample facilities for growers to learn this slightly different method of packing. The horticultural adviser for the Mount Lofty Ranges (Mr. E. Leishman) will leave for Tasmania in February to study crown packing methods in that State."

In concluding, Mr. Strickland said that a lidding press was necessary for satisfactory work in putting the lids on the cases, and appealed for the better filling and attaching of labels,

as there had been too much slovenly work in the past in this connection.

Visitors, who included the Minister of Agriculture (Mr. Blesing), and the Director of Agriculture (Mr. Spafford), were welcomed by the Chairman of the Blackwood Agricultural Bureau (Mr. J. H. Pearce) and manager of the orchard (Mr. R. Fowler).

Mr. Blesing spoke of the value of the experimental orchard and Mr. D. B. Adam, Plant Pathologist at the Waite Research Institute, gave a talk on gummosis in Apricots, a disease caused by a fungus in the wood which altered its character.

Mr. H. K. Kemp, of the Department of Agriculture, lectured on Black Spot, which, he said, was a fungous disease, the control of which depended on spraying between bud burst and flowering. If the infection at flowering time was not checked by correct spraying, a secondary infection set in later and caused the damage to the fruit.

ROYAL COMMISSION ON TRANSPORT

Evidence given by Mr. T. Playford, M.P., representing the S.A. Fruitgrowers' and Market Gardeners' Association, before the Commission on Tuesday, February 4, 1938, at 11 a.m., at Parliament House, Adelaide.

To the Chairman—

The executive of the Fruit Growers' and Market Gardeners' Association decided that it was desirable to submit evidence to this Commission, and requested me to represent them in this connection. The Association, which has a membership of more than 700, claims to be fully representative of the fruitgrowing and market gardening industry in this State. It is a large user of the railways. Last year's interstate figures are as follows:—Celery 98,872 crates, Tomatoes 151,400 half cases, and Cherries 22,382 half cases, making a total of 272,654 packages weighing approximately 5,471 tons.

The large increase in production in recent years has made it of the utmost importance that every market be fully exploited. For this to be accomplished, effective distribution is essential. Any transport system which assists in this direction is of vital importance. The consumer is frequently called upon to pay twice the price the producer receives, and that leads to restriction of sales and glutted markets.

Transport is only one of several costs that go to make up the increased price. Others are packing charges, bad debts, retailing costs and losses by wastage. The best

system of distribution.

does not entirely depend upon the severity of any of the particular costs mentioned, but is the one which performs the service at the cheapest rate, taking them all into consideration.

Take, for instance, the case of a town like Port Pirie, for which a special railway freight of 23/6 a ton applies for fruit and vegetables. Road transport would probably be unable to compete at that rate, but taking the other factors into consideration, it has been able to more than hold its own with the railways. Packing costs are eliminated. Personal contact with the retailer enables bad debts to be reduced, and prompt delivery saves wastage. An additional advantage would be gained on the return of empty cases.

Figures supplied by the Railways Commissioner show that the quantities of fruit and vegetables forwarded by his department were as follows:—

For the three months ended September, 1930: 220 tons, 3 cwt., 1 qr. For the three months ended September, 1934: 27 tons, 1 cwt., 2 qr. For the three months ended September, 1937: 15 tons, 9 cwt., 0 qr.

The special freight rate to Port Pirie came into operation in 1935. In 1936, 180 tons was carried to that town, and the total dropped to 80 tons in 1937, but for the current year, with the same rate operating, the quantity will exceed 520 tons.

This improvement is due to the elimination of the break of gauge at Red Hill. The truck drivers buy the fruit they cart in the market and it is very noticeable that any material fall in price prompts them to take greatly increased quantities. Having a personal interest in the commodity they are carting, the drivers load it with greater care than a disinterested person would.

In considering the control of road transport, in connection with the car-

riage of fruit and vegetables, the Transport Control Board appears to have overlooked entirely many material factors. The general policy appears to have been to force the carriage of the produce, to the fullest possible extent, over the railways, irrespective of the consequences, or whether the railways were in a position to give effective service. To illustrate the position, I submit the following letter received by me from Mr. H. C. Austin, wholesale fruit merchant, New Market, Adelaide, dated February 11, 1935:—

Following our 'phone conversation re transport of Duchess Pears in particular, I packed 900 cases of Pears at Waikerie, Saturday, Sunday, Monday. The train loaded Tuesday and by the time I got them into cold store the heat had got them and they colored up, thereby making them too far advanced to ship to London as intended. Motor transport would leave Waikerie each night carrying 200 cases as packed, and land in cold stores within five hours, which saves them heat and gives me first-class fruit for export. I am a strong advocate for the railways, but to make a success of exports, motor transport from Waikerie, Clare, or any outlying districts is essential if we are to export soft fruits successfully. I have tried it right out, and having the growers' interests at heart and the success of the export trade in mind, I strongly advocate the Transport Board to allow free transport on these roads for soft fruits.

Mr. Austin's letter was submitted to the Minister of Railways and he obtained a report from the Chairman of the Transport Control Board as follows:—

The details contained in Mr. Austin's letter have been referred to the Railways Department, and a report from the General Traffic Manager is attached. This shows that Mr. Austin and his representative, Mr. Rust, were not aware of the arrangement which has been made for the transport of Pears by passenger trains at goods rates, plus 5/- per ton, and they sent the Pears by goods train. The goods rate for Pears from Waikerie to Port Adelaide is 30/3 per ton and the rate per passenger train 35/3. The road carriers from Waikerie used to charge 62/- per ton for fruit and £3 per ton for general goods, so that it is cheaper to send by train even if the passenger train is used to save time. The damage in this case was evidently caused by delay in transport, and this will no doubt be avoided in future. The General Traffic Manager says:—"For the next season more definite arrangements will be made with these various districts to ensure that all concerned are fully aware of the facilities offered by the Railways Department."

By 1932 the Waikerie route was controlled by the Transport Control Board. In 1935 we were given the assurance that for the following season more definite arrangements would be made. Prior to control the railways were charging 30/3 a ton, and road carriers £2 a ton. Despite the disparity in the rate, the Trans-

ROYAL AGRICULTURAL SOCIETY OF NEW SOUTH WALES

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AND 150th ANNIVERSARY EXHIBITION

9th to 23rd APRIL, 1938

Entries Close in Sections:

STUDENTS' JUDGING COMPETITION	Friday, 4th March
CATTLE, "COUNTRY LIFE" CATTLE JUDGING COMPETITIONS — GOATS, PIGS, WINES	Monday, 7th March
BUTTER (Classes 6 and 7), POULTRY, AGRICULTURE (inc. Fruit and Apiculture)	Friday, 11th March
DAIRY PRODUCE (unless otherwise stated)	
PIGEONS, CANARIES AND CAGE BIRDS	Saturday, 12th March
DOGS AND CATS	Monday, 14th March
MISCELLANEOUS	Tuesday, 15th March
WOODCHOPPING AND SAWING CONTESTS	Monday, 21st March
HORTICULTURE	Friday, 8th April, and as stated

G. C. SOMERVILLE, Secretary.

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Royal Commission on Transport (Continued)

port Control Board intervened on behalf of the railways and closed the road to the carriers, and the rate is quoted in its report, presumably as a justification of the action.

It apparently did not occur to either the Board or the General Traffic Manager that the road carriers were giving a different type of service compared with that offered by the railways. The railways had scarcely started to consider the requirements of the particular traffic. Probably in this instance the 3d. per case presumed to be saved by the Board in freight was lost many times over owing to the condition of the Pears on arrival in Adelaide. A parcel of ripe fruit of this description suddenly forced upon the market could affect the growers' returns appreciably. The arrangement which had been made for the transport of Pears by passenger trains at goods rates, plus 5/- a ton, was not "offered" as suggested in the Transport Control Board's report. A recent letter from the Railways Commissioner states:—"The rate when operative applied wherever a request was made for the service from the country to the city and was availed of to a limited extent only." Apart from this detail, passenger trains obviously are run at such times as are convenient to the travelling public, and in this case would be through the heat of the day.

To quote another example of control before service, the following is taken from the Transport Control Board's report, previously referred to:—

Mr. Austin, in his letter of February 11 to Mr. Playford, makes reference to motor transport from Clare as well as Waikerie. I am unable to understand any complaint from Mr. Austin so far as Clare is concerned, as fruit leaves Clare at 6.43 a.m. daily in the Government Depot at Port Adelaide by noon. The only complaint Mr. Austin might have regarding fruit from this district during the recent season was with regard to the first consignment, which was badly handled. As, however, Mr. Austin was compensated for the full value of the consignment, he should have no complaint in this direction.

In my opinion the position has improved considerably during the last two years in so far as railway service is concerned. The ineffectiveness of the protection given by the Transport Control Board has compelled the railways to take action on their own behalf, which has meant the adoption of more progressive business methods and considerable adjustment in the freight rates charged. The charge for conveying 10 cwt. of fruit and vegetables 100 miles two years ago would have been computed as follows:—

33/4 a ton for less than ton lots, plus 3/4 (10 per cent.) for checking, plus 1/1 $\frac{1}{2}$ loading, plus 1/1 $\frac{1}{2}$ unloading, making 38/11 a ton, or 19/6 for 10 cwt.

The present charge is:—

26/1 for a ton for less than ton lots, or 18/1 for 10 cwt.

The freight rate is largely based upon what it is presumed the traffic can stand. Whatever the merits attached to such a method at the time the railways had a virtual monopoly of the transport of the State, I know of no system that could place at the railways at a greater disadvantage in competition, with road carriers.

I believe that the sooner the railroads discontinue placing reliance on legislative protection and systematically adjust their charges on the cost of the service rendered, the sooner they will secure their fair share of the carrying offering. I do not believe they can secure it any other way. Competition has already compelled a tremendous number of adjustments. To give some idea of the present position, I submit the following printed rates for 100 miles:—

Wheat	13/8 a ton*
Wool	47/3 a ton*
Super	10/1 a ton*
Firewood	11/10 a ton†
Fruit and vegetables	21/1 a ton‡

*Subject 20 per cent reduction.
†Less 2/- Government grant and further 2/- on contracts.
‡Special rate of 23/6 a ton per passenger train.

The control exercised by the Board in areas not served by railways has been prejudicial, without any justification for the interference. The net result appears to be the suppression of necessary competition and a heavy taxation charge being levied in the form of a license fee. This fee usually is a percentage charge on the gross takings and has been used to offset the compensation paid by the Board to carriers previously operating in railway areas.

The justification that areas not served by railways should be obliged to contribute to provide compensation to carriers turned off the road in the interest of the railways has not been explained to me.

If the railways are to benefit it is more reasonable that they should provide the compensation which makes the charge general on the taxpayer, rather than inflicting an extra charge upon an individual section.

The present transport control applies only to vehicles running for hire and reward, and does not affect vehicles engaged in carting a person's own property. I believe that the most serious consequences would result from bringing the latter class of vehicle under control. It would be bitterly opposed by every section of our producers, who have already experienced the disadvantages of even the limited form of restriction now operating.

Certain produce has been exempted by the Board, presumably on account of its perishable nature. This has not been extended to fruit and vegetables, although in many instances they are undoubtedly of a highly perishable nature.

I understand that in at least one other State all fruit is exempted from control. Overseas competition is particularly severe with regard to Apples and Pears, and it is of the utmost importance that growers for-

The South Australian Fruit Marketing Association

THE monthly meeting of the Executive of the S.A.F.M.A. was held at the Secretary's Office, Adelaide, on February 25, 1938.

Present.—Messrs. J. S. Hammatt, M. G. Basey, J. B. Randell, A. R. Willmott, F. F. Redden, M. Vickers, S. M. James, T. Playford, H. J. Bishop, P. R. B. Searcy, and the Secretary. The President, Mr. H. J. Bishop, occupied the chair.

Junior Apple Packing Prizes.

A cup was selected for presentation to the winner of the Junior Apple Packing Prize at the last Royal Show, Mr. C. J. Young, the Secretary, was instructed to have the cup inscribed and forwarded to Mr. Young.

Correspondence.

Letters from Australian Apple and Pear Export Council re Apple Publicity.

Empire Fruit Council: Basis of quota allocation; State Supervising Officers; revision of Ottawa Agreements.

It was agreed to recommend that Everard Ross represent fruit interests, and to suggest that the Apple and Pear Council should ask the S.A. Government if the services of Sir Charles McCann could be made available to assist Mr. Ross.

Fruit in Hotels.

Mr. F. F. Redden stated that he had been informed by an overseas visitor that an extra charge of 9d. was made at a leading city hotel for serving fruit, and the following resolution was unanimously passed:—

"That the Executive of this Association deplores the policy of leading city hotels of making an extra charge for fruit."

The Secretary to write the "Advertiser" conveying this resolution and

ward their fruit in the best possible condition.

Quick transport, if possible, in the cool part of the day, is a vital factor for the successful exportation of high-class fruit. This fact has not been appreciated by the Transport Control Board and even export fruit has been subject to control necessitating a journey through the heat of the day. The same position applies to fruit placed in cold store.

Although control has been enforced for many years, no satisfactory arrangements have yet been made to handle fruit. The arrangements now in operation provide greater facilities to some districts than to others, and better provision is made for bringing fruit to the market than for taking it away. Some districts are given concession which places them in an advantageous position, compared with other districts, in securing markets. The present policy places members of the Fruitgrowers' and Market Gardeners' Association in an unfavorable position and it is considered that more attention should be given to carriage of fruit to the country.

setting out the facts as stated by Mr. F. F. Redden.

Trade With India.

Mr. Playford reported on a discussion between Mr. A. G. McCann and Mr. Heading, of the MacDonald Hamilton Line re freight for fruit for India.

As a result of the discussion a regular service would operate and space would be reserved for S.A. for 700 cases Apples per month if required.

Weather Conditions.

It was agreed to record in the minutes the fact that the extraordinary weather being experienced was having a very serious effect on the picking and packing of fruit. In many cases the ground is so boggy that growers are unable to get into their orchards and they are being very seriously hampered in their work.

"BOTTLE FED" TREES.

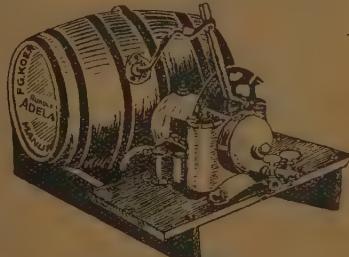
A typographical error crept into the report by Mr. W. E. Muspratt in the February "Fruit World," page 7. Referring to the injection of plant foods into trees, the paragraph relating to C.O.P. Apple trees should have read:—"The solution contained one-quarter per cent. of phosphate of potash and one-quarter per cent. of urea, a substance containing nearly twice as much nitrogen as sulphate of ammonia and also more easily utilised by the plant."

An Apple and Pear Grading Chart is to hand from Gerrard Wire Tying Machines Co. Pty. Ltd. The chart contains interesting information and diagrams re counts, sizes, and dimensions for packing both Apples and Pears in the standard and "long" bushel cases.

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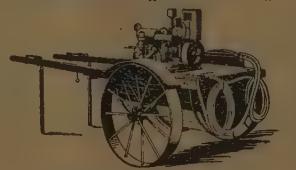


Tractor Orchard Mouldboard Plough

The International B-7 tractor orchard mouldboard plough is made in 2 and 3-furrow sizes. The 2-furrow can be converted to a 3-furrow and vice versa. Special drawbar permits ploughing right up to base of trees.



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MID-MURRAY NOTES

High Quality of Currants This Season — Cold Potash Dip Favored for Sultanas — Emulsified Oil Recommended — Pruning Sultanas to Regulate Crops — Interesting Discussion on Irrigation and Drainage — Sulphur as a Soil Corrective — Now is the Time to Sow Cover Crops — Comparative Values of Leguminous and Non-Leguminous Crops.

By Our Correspondent.

THE HARVESTING of Currants and Sultanas is in full swing now, and the floating population which arrives every year to take part in this seasonal work radiates to all parts of the settlement in every imaginable kind of conveyance.

This influx of humanity is made up of every grade of social life, from the down and out "hobo" to university graduates. Side by side along the trellis row of vines they chat as "cobbers" as the work goes on. Some years ago among my pickers were an Austrian noble and a keen eyed shifty individual. The latter was a good picker, and did his work well. On finishing up the season I was speaking to him in the street, and on leaving, one of the local "arms of the law" asked whether I knew him. "Yes," I said, "he's my best picker." "So he ought to be; he's the State's champion pick pocket," was the reply. I missed nothing and he did his work well, and so as far as I was concerned there was no complaint.

Every grower who employs many harvest hands becomes a student of psychology, but is not always right in his first hasty summing up of an applicant's character.

Some heavy crops of both Currants and Sultanas are being harvested. Currants should be a decidedly better sample than last year, taken over the whole area.

The January rain caused some splitting of berries, but as the fruit was not sufficiently sugared to make a good Currant at the time of the rain, the shrivelled berries will probably blow out of the grading machine with the stalks, and leave only the good fruit behind.

Some growers registered a very high Baume when testing their fruit for drying and many reports of 16 degrees have been attained. At this test, the fruit will be full bodied, and will dry heavy. During the seasons of 1936 and 1937 we had up to 3½ inches of rain in January, which did not allow of a good quality fruit, and as a consequence, prices in the overseas market have been in keeping with the quality.

It will be very gratifying to all concerned in the industry to know that this year's sample will be better than that of the preceding two years.

There is a decided swing towards the cold potash dip for Sultanas this year. This dip has proved itself the best fine weather dip and the safest bad weather dip.

During the past two years comparisons between the mixed dip (potash and caustic soda, dipped at a temperature of 185 degrees), and cold potash dip, show the weakness of the mixed dip, because of the fact that the skin of the fruit has to be cracked, which causes mould to set up during continued bad weather. On the other hand, the cold potash dip retains the skin unbroken, and commences drying from within. In the past years the strength of potash used in this dip was 25 lbs. potash, 1½ pints olive oil to 50 gallons water. Research work at the Merbein Experimental Farm resulted in the potash content being reduced to 18 lbs. potash to 50 gallons water with 3 or 4 pints emulsified oil.

Emulsified oil has an advantage over straight olive oil owing to its finer particles through emulsification.

With the use of straight olive oil, many growers using this dip fail to get an emulsification comparable with emulsified oil. Every year, Sultana growers in some part of the settlement are confronted with a peculiarity of many bunches failing to mature the full length of the bunch, the bottom end would not sugar up. The cause of this is diagnosed as lack of soil moisture during the process of sugar formation. Perhaps it would be more fitting to call it a lack of sufficient plant foods during the above process, as this characteristic can be found in places where there has been no water shortage at any time during the development of the fruit.

Two other causes are likely to bring about the undeveloped condition of the apex of the bunch, one of which is a high concentration of soluble salts in the soil, and the other is for a vine to produce a larger number of bunches than the vine is capable of developing; or in other words, too much fruiting wood has been left during last pruning season.

In recent years there is a tendency to leave more canes on Sultana vines (as they increase in vigor) than was in practice formerly. As this theory is discussed among growers, many act the same with weak vines as their neighbours do with strong, vigorous vines, consequently a large number of bunches are produced, but the vine finds itself unequal to the task of fully maturing them all, with the result that they "peter out" at the bottom.

At the last meeting of the Renmark North and Chaffey Agricultural Bureau, the evening was devoted to receiving and discussing a report made by Mr. W. E. Muspratt on the many problems which he noted after an absence of about ten years from Renmark. Mr. Muspratt was at one time an advisory officer attached to the Department of Agriculture, and took an important part in giving advice to returned soldiers during their repatriation to irrigation blocks on the River. The report was read by Dr. W. E. Meier, who is also keenly interested in our horticultural work, and is carrying out experiments at the Renmark District Agricultural High School where he acts in the capacity as Horticultural Master. Mr. Muspratt's report dealt with every phase of work, but drainage and irrigation in particular.

On the subject of irrigation it was pointed out that the present position of a high water table has arisen through the abuse of irrigation water and that during his observations he noted that some blocks were still using at least 50 per cent. more water than was necessary to maintain healthy growth which caused a further building up of sub-soil water.

The Difficulty of Draining a tract of country without a natural fall sufficient to take away surplus water was encountered at Block E and Chaffey. The old course of Ral Ral Creek could be traced by the clay banks thrown up at given points and leaving seams of sand through which the "get away" found its natural outlet towards the Block E pump in the one direction and towards Ral Ral Creek in another direction.

Owing to the irregular disposition of these sand seams, it could readily

MID-MURRAY NOTES

(Continued from page 28)

be seen that although the over irrigation of one block may not materially affect that block, the surplus water would be carried off underground, and seriously affect his neighbour.

One cause of over irrigation pointed out by Mr. Muspratt was due to badly graded blocks, which necessitated flooding, sometimes to a depth of 4 in. to enable water to be pushed through the lower points to irrigate the higher portion of the block. Many mistakes had been made in the past, but in the light of fifty years of irrigation there was no reason for mistakes to continue. Each block has its own particular irrigation peculiarities, which can only be understood through experience by the individual himself.

A suggestion made by Mr. Muspratt to overcome the tendency to overwatering was to set a time limit of from 2 to 2½ hours per acre for each irrigation. Prolonged irrigation is often caused through head ditches being too small to take a stream capable of finishing in that time. Weeds in head ditches also limits the stream. Low headlands are a source of great annoyance, for they necessitate constant banking up at each irrigation. Being a strong advocate of the use of sulphur as a soil corrective, it was suggested to use agricultural sulphur, which can be purchased at about £9/7/6 per ton, and mixed with gypsum this combination is capable of liberating phosphates and other plant foods besides improving the mechanical condition of the soil.

Mr. Muspratt approached the practice of delving and burying of cuttings with reservations, especially on the Block E soil types of a porous nature. He believed that this practice has a tendency to absorb additional irrigation water which would aggravate the water table level.

At the conclusion of the paper, a good deal of discussion took place, particularly on the matter of irrigation and drainage. One member thoroughly agreed with the contention that a great many growers are using considerably more water than is necessary.

Mr. F. Storey commented on the use of sulphur on salty land, saying that on a piece of land which had become white with a salt crust, he buckscrapped the top crust off, and applied sulphur at the rate of about 10 cwt. per acre, and flooded the patch. It was now in good condition and capable of growing anything, part of which was used as a garden upon which roses were growing well.

Mr. L. Moss thought that although there was perhaps no urgent need for a general drainage scheme embracing the whole settlement, there was an urgent need for a stock-taking of the danger spots. The danger spots were not improving, and he thought that as there were three members of the Irrigation Trust present, an expression of opinion of that body would be welcome.

Mr. Storey said that it was hardly fair to expect the present members to voice the opinion of the members not present, but he could assure those present that the Trust had a programme of constructive work which would be found beneficial to the whole settlement.

March is the best month to plant cover crops, so as to enable them to mature sufficiently to be ploughed under by July. Tick Beans have been favored for the purpose in the irrigation settlements, but this plant is not the best under all circumstances. Tick Beans can be best grown where a constant source of moisture is guaranteed.

teed. They are gross feeders and require more water than any other legume. It is not advisable to plant Tick Beans in a soil which is inclined to dry out, unless two irrigations can be given, and it is dangerous to plant them in localities threatened with a high water table if two irrigations are necessary to bring them to maturity. Peas, Rape, Rye Tares, Barley can all be successfully grown on one irrigation. It must be borne in mind, however, that if a non-legume is used as a cover crop the plant will draw on the nitrate reserves in the soil for its sustenance and to bring about a return of nitrate in the Spring, it would be advisable to apply nitrates in an artificial form. This is not so urgent when a legume is used as a cover crop: that is to say, if the cover crop is planted in March and ploughed under in July. If the cover crop is not matured until August or September and is left until then to be ploughed under or disced down, there will be a drag on the nitrate in the soil just at a time when the young growth on the vines need all they can get, and then an artificial application will have to be made, but if the cover crop is planted in March and ploughed under by July, this gives two full months for the process of nitrification and humification to take place before it is needed by the vines, and in this case it is not so urgent to make an early application of artificial nitrogen if a legume is used as a cover crop.

Social Held January 27.

Some time ago a decision was arrived at between the two co-operative societies handling the bulk of our dried fruit and wine and spirit interests to hold a combined social this year instead of each company having its own social. The Renmark Fruit Growers' Co-operative Ltd. represented the dried fruit interests, and the Renmark Growers' Distillery Ltd. (also a co-operative body) represented the wine and spirit part of our industry.

Mr. H. D. Howie (chairman of directors of the Renmark Fruit Growers' Co-op.) occupied the chair and welcomed Mr. C. A. S. Hawker,

M.H.R., and visitors of kindred societies from other settlements, and after mentioning the fact that this combined social was not arranged on a matter of economy, but merely as a gesture of the good feeling which exists between the dried fruits and wine making interests. One being complementary to the other, and both work in close harmony, Mr. Howie called on Mr. C. A. S. Hawker to toast "The Industries." Mr. Hawker, in the course of his remarks, congratulated the Australian dried fruits industry in their recent effort in stabilising the industry by absorbing the antagonistic element to orderly marketing. The speaker indicated that this was a more satisfactory way of overcoming a difficulty than recourse to legislative measures. In the unavoidable absence of Mr. D. T. Durieu, the chairman of the Renmark Growers' Distillery, the vice-chairman, Mr. H. E. Edmonds responded on behalf of that body.

Mr. Edmonds sounded a note of warning to growers regarding the overplanting of wine and spirit varieties of Grapes and its effect on the over-production of wine and spirit. Unless a renewal of the wine bounty took place, the present Bounty Act expired in 1940, the discontinuance of which would have serious repercussions on this industry. It was reassuring to know that the present Federal Ministry realised this position as there was then a hope of its further continuance.

Mr. Howie responded on behalf of the Renmark Fruit Growers' Co-op.

During the evening musical items were rendered and a very successful social was brought to a close in singing the national anthem.

A severe "freeze" in California last season was responsible for the loss of 16,000,000 bushels of Oranges, in addition to proportionate losses of Lemons, Grapefruit, etc.

Last season the California Fruit-growers' Exchange (Sunkist) spent £270,000 on advertising. This was a reduced figure from the original allocation, because of the losses caused by the "freeze." Their publicity is on educational lines.

NEWS

GERARD

Has published a new larger and better
PACKING CHART
for Apples and Pears

A COPY WILL BE POSTED
FREE

on application, to fruit growers, packers and members of school packing classes.

WRITE PROMPTLY for your copy, merely giving your name and address and saying:—
"Apple and Pear Chart Please."

GERRAID
SERVICEGerrard Wire Tying
Machines Co. Pty. Ltd.

18-24 IRELAND STREET,
WEST MELBOURNE, C.3.

Sydney, Brisbane, Adelaide, Perth,
Townsville, Hobart.

Citrus Growers should have a copy
of Gerrard Citrus Packing Chart.

ARE YOU

GRUBBING?

Previous
experience had
convinced me that
to be really efficient
a grubbing machine
should have ample power
and ropes that will meet the
heavy demands required of them.

I found that shovel and axe work
is very costly either by itself or in
conjunction with a machine. The machine
that offered these features, with a host of
others, was THE "MONKEY" GRUBBER.

It gave me the power of 260 pairs of hands in a
simple and compact form; the lever is short, so that
I am able to stand firm-footed and get the full stroke.
There are two speeds in the machine, as well as an auto-
matic release that allows me to let off a strain, or as the
machine will work in any position, it comes in for all jobs that
would require a chain block. It is taken to the job on a pair of
wheels like a barn truck, and is rigged for work in a few minutes.
The ropes are in lengths that I find easy to handle, and each one is fitted
with hook and loop couplings, so simple and absolutely IT for effectiveness.
The makers have included a sturdy snatch block with a novel method of
securing to the ropes, and also a fine type of firm gripping rope shortener. The
latter makes it very easy to accommodate the lengths of rope to the tree or stump
being pulled, and is quickly released from the rope. The combination of so many time
and labor saving features makes the "Monkey" Grubber a superior grubbing outfit.

SEE US FOR YOUR GRUBBING NEEDS

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A. G. WEBSTER
& SONS,
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Leading Stores and
Merchants, South and
West Australia.

TREWHELLA BROS. Pty. Ltd. Trentham, Vic.

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Fruit Importers and Salesmen

SHIPPING NOS.:
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W.C.2.
Tel. Add. "TRUTERO".

Make certain of A Good Cover Crop

by

Sowing with

Sulphate of Ammonia in addition to SUPER

Ask for

1&1 or 2&1 Super & Ammonia

SULPHATE of AMMONIA
is INDISPENSABLE in a
WELL-KEPT ORCHARD

H1/36

VICTORIAN NEWS & NOTES

(Continued from page 9)

Water Famine at Harcourt

THE FRUITGROWING DISTRICT of Harcourt is at present facing the most serious crisis in its history, owing to the breakdown of its irrigation supplies.

The Coliban system from which supplies are drawn consists of two main reservoirs with a total capacity of 40,000 acre feet. Domestic supplies for Bendigo, Castlemaine and many smaller towns are also drawn from this source.

In October last there were only 12,000 acre feet available and serious curtailment of supplies had to be made; at present only 3,000 acre feet are contained in the reservoir, and this has to meet the domestic needs of a population of 60,000 people. As it may yet be three or four months before sufficient rain falls to replenish supplies, the seriousness of the situation will be apparent.

Several years ago the Commissioner of the State Rivers and Water Supply warned the Harcourt fruit-growers against increased plantings, as the water available was limited.

The average rainfall in the Coliban watershed is 55,000 acre feet, of which 40,000 is stored. As the water is carried in open channels for a distance of 80 miles, the loss from seepage and evaporation is great, so much so that the Commissioner stated that only 38 per cent. of the water stored reached the consumer.

During the last few years a vigorous policy of concreting the channels was adopted, and now 48 per cent. of the water is made use of. The trouble in the past has been that the water was carried too far afield, when it could have been used with advantage within a reasonable distance of the headworks.

Twenty-five years ago the growers agreed to a water rate on their holdings which would entitle them to preference of supplies during a shortage.

When restrictions were placed on irrigation in October, the Commission agreed to supply the Harcourt growers with 800 acre feet, being equal to one half of normal supplies.

Unfortunately, the drain on the system was so great that early in January after only 650 acre feet had been supplied, all irrigation water was cut off.

The present Government is awake to the seriousness of the position, and efforts are being made to prevent a recurrence in the future.

There is in Harcourt a local reservoir which supplies domestic water to the township, and is also available for a limited number of orchards.

The condition of the remaining orchards at Harcourt and Elphinstone is heartbreaking.

A normal rainfall of 25 inches was last year reduced to 16 inches, so that there was no carry over of water in the subsoil to meet the difficulty, and the most vigorous cultivation could not conserve water that was not there.

In many orchards the foliage has turned yellow or has fallen, and the fruit is small, withered, in most cases past redemption, even if rain does

come. Owing to the setback the trees have received it is doubtful if they will have sufficient vitality to form fruit buds for next season, even if they do, a false Spring may cause them to blossom before the Winter.

The crop will be reduced by at least 400,000 cases of Apples and Pears, and taking these at an average export price of 5/- per case f.o.b., it means a loss of £100,000 to the grower and the State. It also means that there will be no employment for about 200 men who are usually needed for picking and packing the fruit.

During recent years a large industry has developed in the Bendigo district in Tomato growing and irrigated pasture. These have all gone out, and it will take some years to restore the pasture, even if water be made available. The general feeling is that unless water can be assured from other sources, pasture should not be encouraged, and it looks as if a promising industry is doomed to extinction.

As the Coliban system has very definite limitations, the position will not be secure until such time as Bendigo is able to draw its supplies of water from one of the northern rivers. This scheme is not fantastic; it may be costly, but the expense will be repaid, indirectly, many times over, to the industry and the State.

JAS. H. LANG.

Harcourt, 28/2/38.

HARCOURT

During the first week of February a pre-cooled consignment of Grand Duke and President Plums was sent on consignment per S.S. "Strathnaver" to England.

Later in the month the packing shed both of the Harcourt Fruit-growers' Progress Association and the Harcourt Fruit Supply Ltd. were busy with seasonal operations. Washing and wiping machines are being installed.

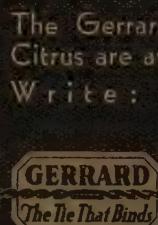
Where irrigation water is available Apples and Pears have sized up nicely, but the district as a whole badly needs rain. Earnest efforts are being made to have extra water storage provided as the inadequacy of the Coliban system has been revealed this year. Where irrigation is lacking the fruit is undersized.

RELIEF FOR GROWERS?

Owing to the plight of many of the producers it has been suggested that an appeal will be made to State and Federal Governments for relief on the principle of drought relief, provided for wheat farmers in the last drought.

Pakenham.—A total of 100,000 cases of Apples is expected for the export season from this district. Much more of the fruit is being sent on consignment than for several seasons past. The use of lure pots is general for determining the most effective times for cover sprays for Codling Moth control.

*Gerrard Sales
and Service*



The Gerrard Fruit Packing Charts for Apples, Pears, Citrus are available, post free, on application.

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16-24 Ireland St., West Melbourne, C.3

SYDNEY

BRISBANE

TOWNSVILLE

ADELAIDE FERTH

HOBART

Motor Cars, Trucks, Tractors

"Bedding" the Bearings

New Engines Require Careful Running

THE need for "running-in" a new engine arises from the fact that by no known process of finishing the parts of an engine separately can they be given that perfect fit and absence of roughness which characterises a carefully run-in engine.

For smooth running, surfaces must not only be smooth, but must also carry a surface film having a marked affinity for the metal. The working surfaces of an engine run-in even with poor lubricants acquire this film in due course.

But quite commonly local seizure (the adherence of the metallic surface of one part to that of another) takes place, and a tearing action occurs before the ideal condition is reached. The damage may be serious or slight, but it is permanent.

Another reason why an engine improves after a period of running-in is that all new working surfaces necessarily have high spots due in part to inevitable microscopic errors in manufacture and in part to microscopic distortion in the shape of the metal itself under the influence of temperature and mechanical stress.

The high spots receive the worst of the wear, but with gentle treatment

and careful lubrication to avoid even the slightest local seizure, the high spots are gradually reduced, mainly by the metal yielding under the stresses imposed.

The most sensitive working parts of the engine are the pistons and cylinders. This is because of the high temperatures encountered, the liability of surfaces to be fouled by soot, road dust, moisture, and acids generated by fuel combustion, and the fact that lubrication cannot be unlimited.

Flooding the pistons with oil leads to excessive carbonisation, which rapidly makes for inefficient operation. The modern tendency is very carefully to control the amount of oil reaching the upper rings of the pistons — an amount adequate for normal purposes, but in many cases not sufficient during the early life of the engine, to obviate the risk of "picking up" of both piston and cylinder.

In such instances there is a good deal to be said in favor of upper cylinder lubrication. The upper cylinder lubrication may be introduced direct by means of one of the special upper cylinder lubricators or by adding small quantities of special lubricating compounds to the petrol.

CHANGE OIL REGULARLY.

The frequency of Summer draining depends largely upon car speed, atmospheric temperature and the rapidity with which dust and other contaminants accumulate in the crankcase.

In general, crankcase oil should be changed every 1,000 to 1,500 miles, the interval depending upon the severity of operating conditions.

Cars driven at sustained high speeds in hot weather should be drained at least every 1,000 miles. The same recommendation applies for cars operated on dusty roads.

Where dust storms are encountered, crankcase oil should be drained immediately after leaving the dust area, regardless of mileage. Air cleaners also should be cleaned thor-

oughly at the same time. When cars are operated regularly in dust areas, the crankcase oil pan should be dropped and cleaned frequently.

Under the most favorable conditions, a car may be driven safely as much as 1,500 miles before draining. However, it should be realised that abrasive dust is always present, and that gradual contamination of crankcase oil is always taking place.

Should your car get bogged in sand it is not necessary to partially deflate the rear tyres in an endeavour to get out.

All that is necessary is to get a bucket and pour some water on the sand in front of each wheel. The sand hardens and you can pull out quite easily.

DOCTOR ADVISES AGAINST ALCOHOL.

Dr. Alexander Baldie, divisional surgeon of the London Metropolitan Police, recently gave a list of refreshment rules of the road. The following are his most important suggestions:

"On any occasion on which the use of alcohol is a contemplated ritual, leave the car at home.

"Avoid alcohol for at least two hours before driving; this period is strictly applicable only to the most modest and conventional amounts. Especially avoid alcohol on long journeys. Avoid alcohol on any journeys undertaken alone. Any alcohol consumed should be taken only with meals.

"Do not select an alcoholic beverage merely to relieve thirst. A routine practice of sipping cold water at intervals on a journey will often counteract fatigue and remove any desire for alcohol.

"The wheat should never be mixed with the grapes. 'Cocktails' and spirits are relatively 'explosive' in their action; beer is apt to cause drowsiness under conditions of fatigue or monotony.

"Never speed the parting guest who has been already well entertained, and who has to drive home, with 'just another little drink'."

BUMPS IN ROADS.

A report from California states that the Highway Authorities now use a "bumpograph" to detect bumps in the road. It has features similar to a tennis court marker with a whitewash attachment. When a bump is reached the machine leaves a mark over the summit of the bump to mark it. That's alright as far as it goes, but the story does not say if the authorities eliminate that bump or whether the white mark simply allows the driver to dodge it. Constant drivers learn to know every bump in a frequented road.

NEW INTERNATIONAL MOTOR TRUCK PLANT WILL PRODUCE 700 ENGINES PER DAY.

News has been received that a new plant and buildings, costing approximately £1,000,000, is being constructed at Indianapolis, U.S.A., for the production of an entirely new line of International trucks.

The new plant, covering a 75-acre block, and consisting of a large main building for engine manufacture, a modern foundry, and a heating plant with electric power sub-station, will provide employment for over 3,000 men, and will be capable of producing 700 trucks a day.

It has been found necessary to extend the original Fort Wayne works, which began in 1923, several times during the years, at Springfield and Rock Island, as well as Fort Wayne, until finally the rapidly growing demand for International motor trucks has necessitated the construction of these modern works.

MECHANISATION IN RUSSIA.

The figures below will give a small idea of the tremendous development in recent years of the mechanisation of agriculture in Russia.

In 1928, Russia had 26,700 tractors; in 1932, 125,000; and in 1936, 380,000. The working capacity of the tractors has risen from 278,000 h.p. in 1928, to 6,527,000 in 1936. It is estimated that by 1942 a million tractors will be in use. The tractor and other power units in Russia now constitute more than 60 per cent. of the total power requirements of agriculture. The horse is still the sole power unit on the small individual peasant holdings. This indicates that the trend of modern farming is in the direction of larger farms.

Diesel tractors are being developed as they give greater power per unit of fuel consumed, and they are much more economical to run.

Not only wheat, but all other cereals as well as flax, Potatoes, and many other lines are being mechanically harvested to a vast extent.



WHAT DO I KNOW ABOUT TRUCKS?

ONLY THIS. I've been driving them all my life. All sorts. All sizes. Under all conditions. And believe me if you want a truck that stands up to heavy hard-going stuff, Chevrolet's the answer. It's got guts. Tons of it. It can take all the punishment in the world—it can "take it and like it."

HERE'S AN INVITATION! Take one of these Chevrolets out on the job—on YOUR job. Put it through its paces under your usual working conditions. Find out, first hand, if it suits your needs, satisfies you. Unless you're the odd one in a thousand, you'll find it ideal. There is a big range of Chevrolet Utilities and Trucks—Chassis prices from £233 to £320 (plus Tax). Easy terms arranged.

Chevrolet
TRUCKS

PRESTON MOTORS PTY. LTD.

114 Franklin St., Melbourne, C.1. F3621.



Modern factory at Footscray where Clensel Insecticide and Fungicide is made.

"CLENSEL" Now Made in Australia

Horticulturists who have used Paterson's Clensel Insecticide and Fungicide will be interested to know that it is now made in Australia, so that supplies are now both more accessible and more continuously available. The manufacturing plant, which is owned by Clensel Products Pty. Ltd., is located at Footscray, Victoria, and makes the complete range of Clensel Products—domestic "Clensel" for all sorts of cleaning jobs about the home, Concentrated Commercial Clensel for use in hospitals, hotels, and all large concerns where the range of cleaning operations is both varied and extensive, Clensel Germicide for

farm, dairy and veterinary use, and the well-known and proved Clensel Insecticide and Fungicide.

We are informed that the product made by Clensel Products Pty. Ltd. is identical in every way with the imported article, and users who are already aware of the high standard of purity and general excellence of imported Clensel can now book their orders for the local article, confident that it will stand up to the most exacting requirements.

Sole agents for the distribution of Clensel products are Gibbs, Bright & Co., 34 Queen-street, Melbourne.

DRYED FRUIT NOTES

VINE CUTTINGS.

Select Only Known Bearers.

While the vines are still in leaf is the time to select and tag those from which your cuttings are to be taken, declares the "Queensland Agricultural Journal." Don't leave it to chance in the Winter, and merely take the cuttings at random from a row of the variety to be propagated. Select them from vines of outstanding merit which have proved to be consistent croppers of good quality fruit over a number of years, and which have set bunches of even-sized berries, and at the same time have maintained a healthy and vigorous constitution. Avoid the runts or vines which are inconsistent croppers, and any which persist in setting their fruit in an erratic manner.

While the behaviour of the vines in the vineyard is still fresh in their minds, growers should carefully consider their planting programme, and decide which non-commercial vines are to be grafted over with better sorts.

Select varieties suited to the district, and above all don't plant more than a few new or unknown types for observation purposes. A vineyard should be a valuable asset for many years. Careful selection of both varieties and cuttings can often save considerable expense and time in later years.

The Empire Fruits Council is actively at work in London in making representations for the retention of the present preference for Apples and Pears enjoyed under the Ottawa Agreement.

WHY IS A PRUNE?

While ranging about the country-side not long since, our attention was attracted by a likely-looking Prune orchard. Barring thrips, chilling frosts during bloom time, and deluges when the harvest moon is shining, it occurred to us that the orchard in question might yield manyfold. Whereupon it seemed good to us to approach the grower for his off-the-record opinions about the Prune industry.

We found him back of his barn, seemingly lost in reverie and afflicted, as he admitted, by spring fever. He gazed upon us with lack-lustre eye, when urged to give expression to his thoughts, spat meditatively upon the ground and opined as follows:

"A prune is a kind of fruit that is grown to keep the producer broke and the buyer crazy. The sugar content varies, and the man who can guess the closest is called a Prune grader by the public and a fool by the farmer. The price is determined on a world market and goes up when you have bought and down when you have bought."

"A buyer was told to watch the market and, after a few days, wired his company to this effect: 'Some think it will go up and some think it will go down. I do too. Whatever you do will be wrong. Act at once.'

"Prunes are packed in the Autumn, mortgaged in the Winter and lost in the Spring. Prune growers have the happy faculty of not taking themselves too seriously. What do you think?"

DRYED FRUITS CASE.

F. A. James Suing for £27,000 Damages.

The case is proceeding in which Frederick Alexander James claims £27,000 from the Commonwealth for injury suffered by his business as a result of the Dried Fruits Act which was subsequently declared invalid by the Privy Council.

AUSTRALIAN DRIED FRUITS SALES IN GREAT BRITAIN.

The Commonwealth Dried Fruits Export Control Board advise that during the fortnight ended February 10, 442 tons of Australian dried fruits were sold in the United Kingdom. 297 tons of Sultanas averaged £48/5/10, and 145 tons of Currants £26/15/6 per ton.

Rutherglen. — Mr. F. M. Read, M.Agr.Sc., Chief Inspector of Horticulture, and Mr. D. G. Quinn, Government Viticulturist, visited the Rutherglen Viticultural Station on February 22 for the annual Field Day and wine tasting. Mr. J. F. Brown presided. Many leading wine makers were present. Mr. Read stated that the viticultural expert would be stationed at Rutherglen for the greater part of the year. Mr. Quinn gave an interesting address on wine production.

Truly a Sound Investment

"The 'Simar' Rototiller is one of the best propositions we have entered into, the machine is so reliable, cheap to run, and easy to handle."

(Signed) F. & S.S. Orchardists.

Fruit, vegetables and crops increase in Quality and Quantity when cultivated with a Rototiller. Weeds, manure, fertiliser, and cover crops are thoroughly pulverised and mixed evenly with the soil-making valuable manure accessible to your plants.

More than 10,000 use and value this modern Rotary Cultivator because no other machine can approach the low operating cost or high standard of cultivation it performs.

The "Simar" Rototiller is truly a sound investment that will pay for itself over and over again. Available in sizes from 3 h.p. upwards, suitable for every type of cultivation.

Write for Particulars TO-DAY.

THE "SIMAR" ROTOTILLER

Sole Australasian Distributors :

MOTOR TRACTORS PTY. LTD.

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Cr. Bridge and Young Streets, Sydney.

Victorian Distributors :

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WRITE FOR PARTICULARS—

W. H. BREWER PTY. LTD., Blackwood Street, North Melbourne
Asbestos and Cork Insulation Manufacturers.

- "ZERISTO" Cork Sectional Pipe Covering for Brine Pipes, Ammonia Pipes
- Granulated CORK for insulating Cool Chambers, etc., and for Fruit Packing.

F 2058, F 6452

Export & Commercial News

New Zealand News

Government Control of Citrus — Apple Export — Advertising Fruit

Citrus.—During the past few weeks sufficient information has been released in fruit circles here to enable those interested to anticipate the likely action of the New Zealand Government in connection with the Trade treaty. It was anticipated that the Government had fully considered the complications likely to arise through the almost total lifting of the embargo. Although an official statement has not been made, it is now perfectly obvious that it is the Government's intention to control all imports of Bananas and Oranges into New Zealand, not only from Australia, but all supplying countries. The control is to take the form of Government purchase from overseas suppliers, and Government distribution among the New Zealand wholesale distributors.

This is a drastic step and one which holds many pitfalls for the Government Department concerned. It certainly carries with it an element of unfairness to those firms which, over a period of years and at some times great expense, have developed overseas connections. The non-enterprising type of firm will probably welcome the innovation, as they will secure from the Government all the fruit they can handle free of expense in both energy and cash. It means more or less the socialisation of the wholesale distribution, and as the distributors will be entirely dependent on Government supplies, and will have to carry out the Government's instructions.

New Zealand is certainly turning socialistic, and this latest development is almost certain to eliminate all competition in the supplying countries. Of course, it will be claimed that the Government can do this job better than private enterprise—that remains to be seen—but on the methods proposed the Government will carry the full responsibility of the market price and the quantities available, and they must be prepared to take the kicks from the public when the fruit is dear and the losses when gluts occur.

Summed up, the Government's policy imposes a distinct hardship on firms that have shown enterprise and initiative, alternatively it will confer a benefit on those who are not justly entitled to anything but a very small share of the fruit import trade.

Apple Export.—The crop is even better than anticipated. It is quite obvious New Zealand will experience no difficulty in filling the quota agreed upon with Australia. The overseas markets seem to be in the doldrums, and in connection with early fruit from the Southern Hemisphere the question once again arises whether a quota is worth while when the U.S.A. are supplying large quantities, and expect to continue to be until May. This U.S.A. fruit is being sold at what might be termed "ridiculous figures," and while they may be clearing their internal markets, export returns cannot possibly show them a profit.

Unless the English markets quickly recover when the Southern Hemisphere fruit arrives, this season shows little prospect of profits, in fact, with increasing costs, losses are almost inevitable. New Zealand is not in-

terested in an F.O.B. trade to the United Kingdom or Continental markets, therefore it is impossible here to obtain any comparison on F.O.B. values with other years. According to reports F.O.B. operators from overseas are very shy and nervous, and it can be assumed that the proportion sold forward this year from Australia will be very much lighter than previously.

New Zealand has been unfortunate as far as weather is concerned during the packing of the early varieties—Worcester, Cox's Orange Pippin and early Dunns. Very heavy rains have made it impossible in many instances for fruit to be carted from the orchards. This means an increased cost at the packing sheds, as the permanent staff must be retained, and casuals are liable to drift elsewhere if there is no work and pay available. The labour problem in New Zealand is becoming acute, not only because of the rate of wages, but also through lack of experienced shed and orchard hands. Machinery is being installed wherever possible, but any fruit packing machinery can only do a small proportion of the work involved.

Advertising.—In an effort to improve local markets, the Government, through the Internal Marketing Department, have launched quite a comprehensive advertising campaign over the air, which is to be extended as opportunity permits to other advertising avenues. A commencement was made with Williams Bon Chretian Pears, and throughout the day and evening the advertising stations are reminding listeners that now is the time to bottle B.C. Pears.

From market reports the advertising campaign has been successful in avoiding the usual glut, at the same time increasing the return to the grower. It will be interesting to follow the campaign through other varieties. If the Government's effort only proves to the commercial grower that he has to adopt commercial methods in marketing his fruit, it will have achieved its objective.

There is ample scope within New Zealand for a large increase in consumption, and there is only one way it can be secured, that is by letting the public know what the industry has to offer and when it is available.

CANNED FRUIT FROM RUSSIA.

High Quality Fruit in Glass Jars.

On his return from abroad, Dr. R. T. Patton, senior lecturer in botany at the University of Melbourne, reported that Russia would soon be a rival for Australia in the canned fruit trade. The Russians were producing high quality fruit which they prepared for sale in a most attractive manner. They had discarded tins for their canned fruits, and replaced them by jars. He brought with him samples of the labels, printed in English, which were attached to the jars—as an indication that Russia intended to invade the British markets.

Proposals for the reorganisation of the V.C.C.A. were not accepted at their recent annual conference.

What They Say in U.S.A. About Marketing Boards Let There Be No Compulsion

A TASMANIAN CONTRIBUTOR has sent in for publication the following extracts from a leading editorial in the December number of "Country Gentleman" (the oldest agricultural paper in the world).

"There is one vital issue involved in the farm programme that Congress is expected to pass. It is whether, as an advocate of that view stated, there shall be 'power and force behind it.' The answer ought to be unmistakable. Let there be no compulsion about it. The reasons are plain and strong enough to be beyond ignoring.

"By no means have all the other methods of influencing farm production been exhausted.

"No compulsory farm control, enforced against a man's will and conscience by fines, jail sentences or penalising forfeitures, can be fitted

into the American Constitutional framework of human and property rights.

"A measure with 'power and force behind it' runs directly contrary to President Roosevelt's recent avowal of 'the ideal which would substitute freedom for force in the governments of the world.' Unless those were just pretty words, they can admit of no coercion in the provisions of a farm programme.

"Compulsory control over the private affairs of their people is the distinctive mark of the authoritarian States—Germany, Russia and Italy. Their example has proved that, once entered upon, there is no midway stopping point in the process. The lesson is clearly before us. No temporary benefit is worth having if it is purchased at the price of freedom."

Make Your Export Produce a Safe Investment by Shipping to and through

SOUTHAMPTON

PEARS and APPLES

A few days saved mean the difference between profit and loss

There are many reasons why you should ship your perishable produce—particularly PEARS—through Southampton, England's most modern port. Here are some of them:

Substantial local markets with a fruit sales room actually on Southampton Docks Estate. Quicker and frequently cheaper transit to Southern and Midland Towns. The Southern Railway of England runs express freights from Southampton to all these centres, saving days and money.

London is reached by express freight trains in three hours from Southampton—All fruit unloaded in Southampton to-day will be at Covent Garden, Spitalfields, or Borough Market for early morning market to-morrow, with days saved as against fruit discharged by ships calling at Continental and other outports first. The slight additional cost is altogether outweighed by the tremendous advantages of days saved.

Deterioration is avoided by special arrangements for sorting to mark, and quick insulated trains direct to London.

Southampton cold stores available for storage of produce for local consumption or Midland deliveries. Pears can be discharged from ship to cold store in less than 5 minutes.

Before the next exporting season, consider these advantages, and ask for Southampton Discharge for London Markets.

THE QUICKEST WAY TO BRITAIN'S MARKETS

For rates and all general information, write to the Australasian Agents:

SOUTHAMPTON DOCKS

Owned and Managed by

SOUTHERN RAILWAY OF ENGLAND

Australasian Agents:

H. W. BEVAN & CO. PTY. LTD.
55 YORK STREET, SYDNEY

"DURDIN" HOUSE, 14-16 BOND STREET, MELBOURNE

TRADE WITH SCOTLAND

We have received from the combined Chambers of Commerce in Scotland a copy of their illustrated 1938 publication, which contains a wealth of information. The book contains some 160 pages and is entitled "Trade and Commerce between Scotland and the British Empire." Particulars are also given of the 1938 Empire Exhibition to be held at Glasgow from May to October. There will be £10,000,000 worth of exhibits there from all parts of the British Empire.

BUSINESS CHANGE.

ALLEN, Bart, & Son (Archie N. Allan and William Francis), 18 Municipal Fruit Markets Quay-street, Sydney, fruit merchants, etc. On 31/12/37, Archie N. Allan retired. Regd. 4/1/38.

SECOND-HAND CASES.

The very careful precautions taken in sterilising such empty fruit cases as are permitted to be returned to the Murrumbidgee Irrigation Areas were recently described by Mr. H. G. Such, now of the Producers' Distributing Society Ltd., and previously a well-known producer and organiser on the Areas.

Mr. Such stated that at the Stanmore Factory, near Sydney, no fruit cases or fruit from any other centre than the M.I.A. are permitted entry. The Railways Department would not accept cases from the factory for return to the Areas unless accompanied by a certificate from the Quarantine Department that all conditions have been fulfilled.

From the Darlington Factory all cases are fumigated under extraordinarily severe safeguards if the cases are intended for return to the Areas, and the Railways will not accept delivery unless accompanied by Quarantine Certificate. The same conditions apply to any other second-hand cases intended for the Areas.



Cable Address: DAVIS, MELBOURNE.

Code: "ABC," 4th and 5th Editions.

Box, G.P.O. 148B.

J. DAVIS PTY. LTD., Fruit Merchants

8 WHOLESALE FRUIT MARKET

Consignments solicited.
Telephone, F 3232.

One Trial Invited.
Bankers: The National Bank of Australasia, 271 Collins Street, Melbourne.

Telegraphic Address: "Listeria," Melbourne.
Codes: Bentley's A.B.C., 5th Edition.

Postal Address: G.P.O. Box 555D. Telephone: F 6341.
Private: Windsor 4535.

GEO. LISTER PTY. LTD. (Managing Director: J. R. VAIL)
Selected Agents for all Growers' Organisations Throughout the Commonwealth.
Wholesale Fruit Merchants — Licensed Commission Agents — Importers and Exporters.

NO. 18 WHOLESALE FRUIT MARKET, MELBOURNE.

Having carried on a successful business for over half a century, our name stands high in the Wholesale Fruit Trade of Australia. Our spacious premises at Melbourne Wholesale Fruit Market are admirably adapted for the conduct of our large business, and growers are assured that our best efforts are always at their disposal.
Bankers: Commercial Banking Co. of Sydney, Melbourne Branch. Fidelity Bond Guaranteed by L.O.A. Insurance Co.

Silbert, Sharp & Davies
Pty. Ltd.
FRUIT MERCHANTS
17 Wholesale Fruit Market
Phone: F 2287.

REGULAR SUPPLIES OF
GOOD FRUIT, WELL PACKED
AND GRADED,
BRING THE BEST RESULTS.

A. MILLIS & SONS

34 Wholesale Fruit Market
EXPORTERS AND IMPORTERS
Specialty—Prompt Returns. Cheques
every Wednesday. Phone: F 1862.

J. W. ROSS
13 Wholesale Fruit Market
WHOLESALE FRUIT MERCHANT
Prompt Returns and Sales Notes Daily.
Tel., F 2426.

G. WOOLF
29-30 Wholesale Fruit Market
WHOLESALE FRUIT MERCHANT
& COMMISSION AGENT
Telephone: F 5550.

BELL, BANSON Pty. Ltd.
Wholesale Fruit Merchants,
20 Wholesale Fruit Market, Melb.
CONSIGNMENTS OF FRUIT AND
VEGETABLES SOLICITED.
Tel.: F1023; Private: JW2528.
Bankers: E.S. & A. Bank,
Market Branch.

T. STOTT & SONS

FRUIT MERCHANTS

ESTABLISHED 1882.

26 Wholesale Fruit Market, Melbourne, And at VICTORIA MARKETS.
COUNTRY AND INTERSTATE ORDER TRADE SUPPLIED.
PROMPT SETTLEMENTS. CONSIGNMENTS SOLICITED.

Bankers: Bank of Australasia, Melbourne.

Regular Supplies of
Quality Fruit well Packed
and Graded will realize
the Best Prices.

Tim Young & Co.
Pty. Ltd.

WHOLESALE FRUIT MERCHANTS

18 Wholesale Fruit Market

Growers can be assured of receiving
the very best service and prompt
returns.

Cable Address "TIYOUNG"

A.B.C. Code, 5th Edition.
Box 28a, G.P.O., Melbourne.

TELEPHONE, F 4321

Bankers:
E.S. & A. Bank Ltd.,
Melbourne—226 Swanston Street.

Stencil or Labels on application.

H. LOUEY PANG & CO. PTY. LTD.
FRUIT AND PRODUCE MERCHANTS
No. 4 WHOLESALE FRUIT MARKET, MELBOURNE
G.P.O. Box No. 795F, Melbourne.
References—E.S. & A. Bank, 225 Swanston St., Melbourne.

Telegraphic Address: GOOD PRICES ASSURED
"PANGANCO." Cheques Sent Promptly. F 6532.

CONSIGN YOUR FRUIT TO
R. A. WING & CO.
Wholesale Fruit and Produce
Commission Agents,
No. 37 Wholesale Fruit Market,
Melbourne.
Branches 141 Little Bourke Street
and Victoria Market.
TELEPHONE: F1744.

CONSIGNMENTS OF FRUIT
AND VEGETABLES
Assured Highest Market Rates.

P. A. PATRIKEOS
36 Wholesale Fruit Market
Melbourne
Telephone: F2227.

H. & S. FRANKEL
(Established 35 Years)
No. 44 WHOLESALE FRUIT
MARKET, MELBOURNE.
Growers in all States are invited to
send consignments. Highest market
rates and prompt settlements.
Telephone: Store F4574;
Bankers: Private F1555 & F8711.
Commonwealth Bank of Australia.
2500 Fidelity Bond Guaranteed.

A. E. PITT
Established 1893.
Member of Wholesale Fruit
Merchants' Association of Vic.
14 WHOLESALE FRUIT
MARKET, MELBOURNE.
Consignments Solicited from all
States.
Growers Will Receive Top Market
Value and Prompt Returns.
Fidelity Bond Guarantee for £1,000
Per ton and Bean Stands,
11 and 12 Victoria Market.
Reference—E.S. & A. Bank,
Elizabeth St. Branch, Melbourne.
Phone: F 5038.

Producers'
Co-operative
Distributing
Society Ltd.

Are now paying a Bonus
of 10% on all Commissions
charged to regular
clients of the Fruit &
Vegetable Section for
year ending Sept., 1935

Send Your Consignments

TO US

MELBOURNE & SYDNEY.

Successful Advertising in U.S.A.

Heaviest Consumption of Apples in History Has Taken Place This Year.

Wenatchee, Wash., Dec. 24.—By far the heaviest consumption of Apples ever known in all history has taken place during the first half of the present Apple season, Secretary C. E. Chase reported at the last meeting of the Washington Apple Advertising Commission. The total crop of the country in barrels was 70,000,000, of which about 20,000,000 barrels may be counted as non-commercial, going into by-products or being consumed at home. Of the remaining 50,000,000 barrels, no less than 34,000,000 barrels had been consumed or exported, only 16,000,000 being left on hand, December 1. Two-thirds of the nation's largest crop since 1931 had been disposed of in less than half the normal Apple consuming season.

There are still five months of the season remaining, counting December, January, February, March and April, with May and June as marginal months besides. While the supplies on hand December 1 were the largest reported in recent years, they were only about 20 per cent. larger than the ten year average, and only 10 per cent. larger than the heaviest previous year, Mr. Chase reported to the Commissioners. If the domestic and foreign market could absorb Apples at the rate of more than 8,000,000 barrels per month for the first half of the season, there should be no trouble, he declared, in selling 3,000,000 barrels a month for the rest of the season.

While the Commission cannot and does not claim all credit for the record breaking consumption of Apples during the last few months, it does assert that the Washington Apple advertising in newspapers, magazines, on billboards, and over the radio had a vital and definite effect along that line.—"New York Packer," December, 1937.

(Memo.—For the purpose of comparison calculate 3 bushels to the barrel.)

USING VEGETABLE WASTES.**The "Indore" System.**

WHAT has become known as the Indore process of converting vegetable wastes into humus is attracting considerable interest in England, says an exchange. The inventor of the process is Sir Albert Howard, who discusses the process fully. A review of the system is:

The methods of humus making known as the Indore process was adopted, and has proved remarkably successful. About 700 tons of humus was made and used during 1936; this year it will probably amount to 1,000 tons.

As a result of the use of this humus, land under intensive cultivation has already reached a state of independence. For two years no chemicals have been used in the gardens at all, either as fertilisers or as sprays for disease and pest control. The only wash used on fruit trees was lime-sulphur, and it is hoped to do without this before long.

While the farm land is not yet independent of fertilisers, the amount used has been steadily reduced to less than half.

Potatoes that were formerly sprayed four or five times are now sprayed only once, and this, it is hoped, will soon be dispensed with as the land becomes healthy and in a proper state of fertility. With a properly-balanced crop rotation there is no doubt that

the same degree of independence will be reached on the lands as has already been attained for the market gardens.

Reference was made to the satisfactory results obtained by certain tea-planting companies in Ceylon by adopting the Indore process. Now the Chairman of the Consolidated Tea and Lands Co., the largest of its

kind, has added similar testimony. Speaking at the annual meeting, he informed shareholders that the company was steadily increasing the manufacture and use of Indore compost—it is now over 100,000 tons a year—and that it was proving cheaper than any other known form of fertiliser of equal manurial value.

The Indore process has the unique advantage, apart from its intrinsic merits, of saving rather than of spending money. It should prove of lasting benefit in serving to get higher yields and better quality crops, in improving livestock, promoting sanitation and preserving intact capital and the fertility of the soil.



S.S. CARLISLE

**Ship your
Fruit by
Patrick
Steamers**

PROMPT SERVICE - CAREFUL HANDLING - CHEAP RATES

The modern Patrick Steamers are specially fitted for the careful carriage of Fruit. Every shipment, whether large or small, is assured of the same personal interested attention. Prompt

delivery and the greatest care in handling cargo are features of the Patrick Service. Steamers leave Melbourne, Sydney, Newcastle and Brisbane every week,

carrying interstate cargo without transhipment. Cargo received daily. No need to book space. Consign your fruit to us, and we do the rest. For further information apply:

JAMES PATRICK AND COMPANY LTD.
SYDNEY - MELBOURNE - BRISBANE - NEWCASTLE



Licensed under Farm Produce Agents Act.

F. CHILTON

ESTABLISHED 1894

Fruit Commission Agent

SHIPPING NO. 56.

HIGHEST MARKET PRICES — PROMPT RETURNS — RELIABLE ADVICE.

Registered Address for Telegrams and Cables: "CHILTONS."

References:—Bank of N.S.W., Haymarket, Sydney, and Growers throughout Australia.

CITY FRUIT MARKETS, SYDNEY.

N. & A. Fruit and Produce Company

Licensed Farm Produce Agents. (No. 2253)

HEAD OFFICE:

2 STEEL STREET, NEWCASTLE.

References: Bank of New South Wales.
Shipping Numbers on Application.

WE WANT YOUR BUSINESS — IN RETURN, WE OFFER GOOD AND PROMPT SERVICE.

GROWERS!—Consign your Fruit to—

JAMES SLATER

21 CITY MARKETS, SYDNEY.

Postal Address: Box 36, Haymarket P.O., Sydney.
Established 1882.

SHIPPING NO. 19. 88 VIC. & TAS.
Stencils, Advice Notes, etc., on Application.

BRANCH: 6 CITY MARKETS, SYDNEY.

Telegraphic Address: "NANDA."

PHONES:

Newcastle, 1365. Sydney, MA 8428.

HOPKINS & LIPSCOMBE

Proprietor: STANLEY E. POGSON.

LICENSED FARM PRODUCE AGENT.

MUNICIPAL MARKETS, SYDNEY.

PROMPT RETURNS. SHIPPING NOS.—

58 Vic. and Tas., 68 Q'land.

Bankers: Bank of N.S.W., Haymarket, SYDNEY.

Telephone MA 8846.

Established 1900.

W. MUSGROVE & SON

Licensed Farm Produce Agents.

8 City Fruit Markets, Sydney.

Our Motto—Quick Sales and Prompt Settlements.

Forwarding Numbers:

Tasmania, Victoria, S. Australia, No. 52.

Queensland, Northern Rivers, No. 18.

FRUITGROWERS! For Satisfactory Results, Send Your Fruit to

F. H. G. Rogers

Fruit Selling Expert.

Municipal Markets, Sydney.

Shipping No. 82.

Established 1900.

The Victorian Fruit Marketing Association

THE monthly meeting of the Executive of the V.F.M.A. was held in the Board Room, Commercial Travellers' Association, Melbourne, at 10 a.m. on Tuesday, February 22, 1938.

There were present Messrs. G. W. Brown (Chairman), W. H. Carne (Vice-President), J. B. Mills, W. P. Hutchinson, K. Weeding, H. J. Noonan, S. Brown, J. J. Tully, F. Cave, J. M. Ward (Superintendent of Agriculture), R. E. Boardman (Secretary).

Australian Markets Committee.

The Chairman stated that the meeting proposed to have been called within two weeks of the previous V.F.M.A. meeting had not been convened, as no progress had been made with regard to collection of funds.

The Australian Apple and Pear Council wrote stating that the Federal Government had declined to collect funds for Australian Apple publicity by means of an excise levy, and that a further letter had been sent to the Prime Minister requesting him to receive a deputation on this matter, also re bounties for 1937 and 1938.

In the discussion emphasis was laid upon the necessity for prompt action if any effective campaign were to be launched this season, and it was decided to request the Apple and Pear Council to telegraph to the other State Associations requesting them to wire to the Prime Minister, emphasis-

ing the importance of this matter, and also requesting State Associations to contact their Federal members in this connection. Further, that a copy of the correspondence with the Government Departments be sent to various members of the House of Representatives, including Messrs. Fairbairn, Hutchinson, Rankin and Hawker.

Trade with the East.

Mr. E. I. Lawford wrote stating that now the V.F.M.A. had a Committee dealing with Eastern Trade matters, he would be glad if someone else would act in his position as Association's representative.

The Chairman advised that Mr. K. Weeding had been appointed to act in this connection.

Empire Producers' Conference.

Letter received from the Australian Apple and Pear Council enclosing correspondence from the Secretary of the Empire Producers' Conference, to be held at Sydney, March 26-April 7, 1938.

Mr. Mills reported that Mr. J. H. Astell would be in attendance on behalf of a Tasmanian organisation. A paper had been prepared setting out the constitution and operations of the Apple and Pear Council. It was decided to recommend that the Apple and Pear Council be represented at the Conference.

Empire Fruits Council.

Letter received from Australian Apple and Pear Council enclosing correspondence from Empire Fruits

Council, London, detailing the activities taken in opposition to any reduction of the present preferential duty of 4/6 per cwt. Noted with appreciation.

State Supervising Officers.

Letter received from Department of Commerce stating it had been decided not to send State Supervising Officers to London this season. The Chairman stated this matter would be dealt with at the next meeting of the Apple and Pear Council.

Black Spot Experiments.

The Secretary reported having attended by invitation at Mr. W. A. Thiele's orchard at Doncaster, to inspect, with Government Biologist and others, the result of the spraying tests for Pear Black Spot control.

The Government Biologist (Mr. Fish) had pointed out that the seasons had been unsuitable for Black Spot development, the unsprayed trees being perfectly clean. The proved formula for Black Spot control had again shown, as expected, the Russet on Packhams; weaker Bordeaux cover sprays had reduced the russet, but the opportunity had not been present to determine whether the weaker Bordeaux would control Black Spot.

The continuation of the experiments was recommended by Mr. Fish. Report received.

Plum Export.

The Department of Agriculture wrote giving particulars of unsatisfactory shipment of Early Willson Plums, which arrived from Australia at Batavia in December last. This variety, it was stated, was deemed to be unsuitable for the Netherlands East India trade.

APPLE EXPORT.

Mr. W. M. Carne's Report.

Mr. W. M. Carne, Commonwealth Fruit Research Officer, writing from Hobart, directs attention to the misplacement of type in the January "Fruit World," page 11. The paragraph should read (item 10):—

The defects of grading in Australian fruit are so marked that buyers can only buy on sample or subject to rebate if not fair average for the grade. U.S.A. and Canadian Apples are bought f.o.b. on the basis of detailed Federal or Dominion certificates, which are *prima facie* evidence of the condition, etc., of the fruit at the time of inspection.

Australian fruit is bought f.o.b. on the basis of a certificate which is not legal evidence as to the condition of the fruit, etc., when examined, and which is based on an inspection designed to ensure as far as possible a minimum standard.

LONDON PROSPECTS.

Competition from U.S.A. Winesaps Not Feared.

Mr. Eric E. Burgess, of Hobart, representative in Tasmania for the T. J. Poupart Ltd., London, writing under date February 21, advises having received a letter written by Messrs. Poupart on January 18, in which they state:—

"We anticipate that normal conditions will prevail, both as regards demand and prices for Apples and Pears. There are large quantities of United States Apples still in cool storage, particularly Winesaps—but the bulk of these will probably have been marketed before your Apples arrive, and it is not expected that these will have any serious effect on values Australasian."

CALIFORNIAN PEACH PACK.

Effective System for By-Products.

£62,000 for Advertising.

The Californian Cling Peach pack from the 1937 crop was 12,237,250 cases, No. 2½ can basis.

The tonnage received by canners amounted to approximately 322,000 tons, of which approximately 282,000 tons were packed into peaches and 40,000 tons into by-products, such as fruit cocktail, fruit for salad, pickled Peaches, Peach juice, etc.

The sum of £62,000 has been set aside for publicity.

COUNCIL FOR SCIENTIFIC AND INDUSTRIAL RESEARCH.

Comprehensive Annual Report.

We are in receipt of the eleventh annual report of the Council for Scientific and Industrial Research for the year ended June 30, 1937. A perusal of the contents shows that a wide range of subjects had been covered.

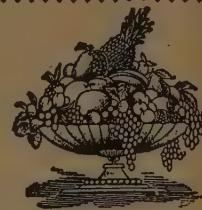
Fruit investigations include storage, Sultana vines, citrus, and "Die Back." The Apple and Pear Grant of £20,000 is being expended upon research in Codling Moth, spray and fertiliser trials, Black Spot, green manuring, removal of arsenical residue, and mineral deficiencies in Pears. Efforts to control the Peach Moth (*Cydia molesta*), by spraying have proved unsuccessful, but an attempt is to be made to breed a parasite, *Macrocentrus*, and liberate it in large numbers. The Council also gives a detailed report of its activities re pasture, wheat, peas, various parasites, noxious weeds, animal health and nutrition, soil, and the Irrigation Settlements, together with lists of the personnel, etc.

Leading Agents in the

BRISBANE

FRUIT

MARKETS



Highest Prices.

A. S. BARR

Prompt Returns.

FRUIT EXCHANGE, BRISBANE, QUEENSLAND.

Wholesale Fruit Merchant and Growers' Agent.

A Trial Solicited. Returns Speak for Themselves. Shipping No. 19. Established 1888. Registered Telegraphic Address: "Barr, Brisbane."

ESTABLISHED 1892.

W. ARKELL & SONS

GROWERS' AGENTS.

SHIPPING NO. 12. Brisbane, B.12

BEST PRICES, PROMPT ADVICE AND REGULAR SETTLEMENT.

Bankers: National Bank of Australasia, George St., Brisbane.

MURRAY BROS.

Municipal Markets

BRISBANE

Consigning Nos.— RAIL 82, SHIPPING 22

Phone: B 4527.

Do not run any financial risk with your fruit but consign it to

HEDLEY GEEVES PTY. LIMITED

Telegraphic Address: "Apples, Brisbane."

(Hedley Geeves, Managing Director)

Registered Shipping No. 6.

FRUIT EXCHANGE

SELECTED AGENTS FOR:

Victoria: Harcourt Fruitgrowers' Progress Assn. Ltd.
Harcourt Fruit Supply Co. Ltd.
Victorian Central Citrus Assn. Ltd.

Tasmania: State Fruit Advisory Board.
New South Wales: Griffith Producers' Co-op. Co. Ltd.
Batlow Packing House Co-op. Soc. Ltd.

BRISBANE

Established 1911.

Market Notes & Prices

VICTORIA.

Melbourne (4/3/38): Oranges were firm in price, and Pears a shade higher. Pineapples and Bananas tended to be cheaper. Prices quoted by the Victorian Wholesale Fruit Merchants' Association:—Per case: Apples, eating 3/- to 7/-, few higher; cooking 2/- to 4/-. Bananas, per double case, green 6/- to 10/-, choice higher. Cucumbers 2/- to 4/-. Grapes 4/- to 8/-, few choice higher. Grapefruit 6/- to 13/-, choice higher. Lemons 8/- to 14/-, choice higher. Oranges 5/- to 12/-, few higher. Passionfruit, half case 4/- to 8/-, few higher. Pineapples 6/- to 9/-, choice higher. Plums 1/- to 3/-. Cantaloupes 5/- to 7/-, few higher. Peaches, yellow 1/- to 3/-, few higher; white, 3/- to 5/-. Pears 4/- to 8/-, few higher. Tomatoes 2/- to 4/-, choice 1/- to 2/- higher.

The Melbourne market manager of the Federal Citrus Council of Australia reports the following sales:—Val.: Average standard, 75-84 5/-, 96-112 6/- to 7/-, 126-140 8/- to 9/-, 154-182 9/- to 10/-, few 11/-, 200-220 8/- to 9/-, 248-270 6/- to 7/-; selected standards 6/- to 11/-; specially selected 7/- to 13/-, few higher. Lemons: Average standards, counts 180-275 6/- to 10/-, few 11/-, 140-160, 300-330 6/- to 8/-; good standards 8/- to 13/-; specially selected, 180-208 15/-, 225-375 16/-, few higher. Grapefruit: Average standards, 28-38 5/- to 6/-, 45-53 7/- to 8/-, 60-75 9/- to 10/-, few 11/-; selected standards 6/- to 12/-, few 13/-; specially selected 7/- to 16/-.

WESTERN AUSTRALIA.

Perth (2/3/38).—Apples: Jon. flats, 4/- to 8/-, dumps 4/- to 11/-; Dunn's, 3/- to 5/6; dumps 3/- to 7/-; Cleo, flats, 3/6 to 5/6; dumps 3/- to 7/9; Granny Smith, flats, 5/- to 7/-; Citrus: Vals., flats, 6/- to 10/9; dumps 8/- to 15/-; Lemons, flats, 3/- to 9/-; Stone Fruit: Plums, flats, Satsuma, 8/- to 10/6, Delaware 6/- to 9/-; President 8/- to 11/-; Kelsey 7/- to 9/-; President 6/- to 11/-; Grand Duke 6/- to 9/-. Peaches, flats, 5/- to 14/-; Nectarines, flats, 7/- to 16/-. Other Lines: Pears, Bartlett, flats, 5/- to 11/-; dumps 5/- to 12/6; other varieties 2/6 to 5/6. Grapes, open, white, 4/- to 9/6; closed 2/6 to 4/6; colored 3/- to 10/-. Passionfruit, 2 cases, 3/- to 8/6; Tomatoes, flats, 1/- to 5/6.

QUEENSLAND.

Brisbane (19/2/38): Messrs. Clark & Jesser advise prices as follow:—There has been a great scarcity of vegetables for the past few weeks, and for most lines values have been high. Ruling prices are:—Apples: Jonis. 6/- to 7/-, small sizes 4/- to 5/-, Del. 6/- to 7/-, McIntosh Red 5/- to 6/-, G.S. 6/- to 7/-, Munro's 4/- to 5/-. Pears: W.B.C. 8/- to 9/-, Gansells 7/- to 8/-, Howells 6/- to 7/-. Oranges: Vals., 13/- to 14/-, second crop 6/- to 7/-. Lemons: 15/- to 18/-. Peaches: 2/6 to 4/-. Plums: Ponds 7/- to 8/-, G.D. 5/- to 6/-, Pres. 7/- to 7/6. Papaws: 3/6 to 5/-, dump case. Grapes: Muscats 4/- to 5/-, W.C. 6/- to 7/-. Quinces: 5/- to 6/- bush. Bananas: 10/- to 12/-. Passionfruit: 9/- to 10/-. Tomatoes: 4/- to 5/-. Pineapples: Roughs 8/- to 9/- case, smooths 5/- to 6/-.

Brisbane (28/2/38): Messrs. W. Arkell & Sons advise that sales for the week were as follow:—Apples: Local (choice), Jon. 5/- to 7/-, Del. 5/- to 7/-, G.S. 6/- to 8/-. Pears (choice): W.B.C. 8/- to 10/-, Howell 5/- to 7/-. Oranges (choice): 10/- to 12/-. Lemons (choice): 10/- to 15/-. Plums (choice): P.S. 5/- to 7/-, O.P. 5/- to 7/-, Pres. 4/- to 6/-, G.D. 4/- to 5/-. Peaches: 3/- to 6/-. Grapes: Muscats 4/- to 5/6, others 3/- to 7/-. The market is firm for Pears of choice carrying quality. Plums are arriving in extra large quantities, the market being lower. The Apple market is quiet.

SOUTH AUSTRALIA.

Adelaide (2/3/38).—Apples (eating) 2/6 to 3/6 case; do. (cooking) 2/- to 3/-; Bananas (Qld.) 18/- to 20/-. Grapes (dark) 8/-; do. (white) 8/-; Lemons 8/-; Nectarines 14/-; Oranges (common) 8/- to 9/-. do. (Navel) 10/-. Passionfruit 12/-. Peaches 8/- to 10/-. Pears (eating) 6/-; do. (cooking) 4/-. Pineapples 14/-. Plums (light) 3/-; do. (dark) 3/-; do. (Damson) 5/-; do. (Jap.) 5/-. do. (Prunes) 3/- to 4/-. Quinces 3/-.

NEW REGISTRATION.

ARCH FRUIT CO., Municipal Fruit Markets, Quay-street, Sydney, wholesale fruit merchants. Com. 1/1/38. Proprietary: Archie N. Allen. Regd. 6/1/38.

NEW ZEALAND.

Messrs. Reilly's Central Produce Mart Ltd. report under date February 25 as follow:—Heavy supplies of Apples principally Cox's Orange and Gravensteins are now coming to hand. Gravensteins are realising good values, but Cox's Orange have only a fair enquiry, and prices for these are low. Cooking Apples are also coming forward in increasing quantities.

Some very fine quality Freestone Peaches, Plums and Nectarines have been received during the week, and first-grade lines are netting fair values. Supplies of Tomatoes are increasing, and values are low. There is an excellent demand for cultivated Blackberries.

Hothouse Grapes are in excess of requirements, and values for this time of the year are fairly low. Increased supplies of Passionfruit and New Zealand Lemons are being received.

Jamaican Grapefruit is experiencing a very keen enquiry, and Jamaican Oranges are also selling well. The "Maunganui" brought forward a small shipment of Pineapples, which netted good values. A transhipment of Californian Lemons arrived during the week. Ripe Bananas are meeting with a steady sale.

Prices (per case): Cal. Lemons 60/-, N.Z. Lemons 15/- to 20/-, Jamaican Oranges 25/- to 30/-. Jamaican Grapefruit 30/-. Bananas, ripes 23/-. New Season's Apples: Gray, 7/- to 9/6, Cox's Orange 6/- to 8/6, W.P. 4/6 to 6/6, Cookers 4/6 to 6/6. William Bon Chretion Pears 8/6 to 11/6. Pineapples 22/6. Per Half Case: Nelson Tomatoes 2/- to 3/-. Peaches 3/- to 6/-. Nectarines 3/- to 5/6. Dessert Plums 3/6 to 5/6. Cooking Plums 2/6 to 3/6. Greengages 5/6 to 6/6. Purple King 4/6 to 6/-. William Bon Chretion Pears 4/- to 5/9. Cucumbers 2/-. Passions 8/- to 10/-.

MACADAMIA NUTS.

Commercial Cultivation in N.S.W. Advocated.

The commercial cultivation of the Australian Bopple Nut, Macadamia ternifolia, is recommended by Mr. E. C. Cheel, who until recently was the Botanist and Curator of the National Herbarium, Sydney.

The kernel itself is recognised as one of the choicest nuts in cultivation, but one difficulty in the past has been its hard shell. Mr. Cheel has submitted specimens of soft-shelled Macadamia nuts grown on the Tweed River, N.S.W., and recommends that this type of tree should be much more extensively cultivated in the coastal areas of N.S.W. The tree itself is a handsome one, and should be grown even for shade and shelter belts.

Mr. Cheel states that by careful selection improved varieties can be obtained—those with larger yields and soft-shelled nuts.

He points out that considerable developments have taken place in Honolulu and California in Macadamia nut growing.

Ship Your Oranges, Lemons, Grapes to New Zealand

All consignments for this market will have careful attention and realise highest prices if sent to

The Co-operative
Fruitgrowers of Otago
Limited, Dunedin

PERSONAL SUPERVISION
OF
EVERY CONSIGNMENT.

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The Pig Pen...

PIGS AND PORK.

Sweet Potatoes for Pigs.

Prove Better than Maize in Feeding Trials.

FEEDING TESTS to compare the values of sweet potatoes and maize for pigs, carried out at Wollongbar Experiment Farm, near Lismore, indicated that the sweet potato ration (sweet potatoes, separated milk and molasses) produced a very good class of bacon carcass, while the maize ration (maize, sorghum and separated milk) is inclined to produce too much fat.

A pig representative of those fed on each ration, states the N.S.W. Agricultural Gazette, was forwarded to the Byron Bay factory of Norco Ltd., which reported as follows:—

Pig Fed on Sweet Potatoes. — This Berkshire pig produced a very nicely balanced side of bacon. The distribution of fat and lean was very good. Ham weight and shape were very good, while shoulder weight was a trifle heavy. The middle was excellent and showed a splendid eye of meat. Altogether a very good side and very suitable for trade requirements.

Pig Fed on Maize. — The side from this Berkshire lost points for distribution of fat and lean. The fat right through was too heavy for local requirement, not only back fat but there was a layer of fat almost right round the carcass. Shoulder weight was slightly heavy and ham weight a little light. Apart from being over fat the middle was very good.

In the case of the pig fed on sweet potatoes, the heavy shoulder may be attributed to breed rather than feed. In the case of the other pig, while the heavy shoulder and light ham may be due to breeding, the excessive fat must be attributed, in part at least, to feeding.

It is realised, of course, that owing to the fact that only two pigs are concerned, the results are by no means conclusive.

SELF-FEEDERS FOR PIGS.

Lessen Labor Costs.

There is nothing that can lessen the labor costs of the pig-farmer, and make his lot an easier one, to the same extent as the installation of self-feeders for his stock.

The self-feeder is designed primarily to keep a supply of grain constantly before the pigs and, at the same time, protect the contents from wind and rain. It consists of a bin or hopper, to hold the bulk supply of the grain, and a feed trough below, which is automatically replenished from the bin as the pigs use up the feed.

The practice of permitting the pig to feed itself does not have the drawbacks to which such a system would be liable in the feeding of other kinds of animals, as the pig does not gorge itself until it becomes sick and loses its appetite. With the self-feeder the pig makes the most economical use of grain in the production of pork and bacon. It gains weight more rapidly and gets to market at an earlier date, with a saving of labor in feeding and care.

The self-feeder is by no means, of course, a substitute for a knowledge of feeding. Nor must it be neglected. If the feeder is left without attention the feed may become blocked in the hopper, thus leaving the pigs with a "dead" feeder, or the feed may become soiled in the trough, making it unpalatable to the pigs.

Directions for the use of self-feeders for pigs, and details of their construction, are contained in a pamphlet obtainable free on application to the N.S.W. Department of Agriculture, Box 36a, G.P.O., Sydney.

Poulterer: Excuse me madam, you have not paid the account for your Christmas turkey yet.

Lady: I'm sorry. My husband sprained his wrist so badly carving that turkey that he can't write out the cheque.

ROTOTILLERS AT THE ROYAL EASTER SHOW.

The Sydney Royal Agricultural Show presents an excellent opportunity to examine and draw comparisons of the various farming and cultivating methods. One of latest and most interesting machines introduced into Australia, the "Simar" Rototiller, will be on view.

In comparison with the less modern methods of cultivation, the chief point of difference is the fact that instead of dragging a rigid tool, the "Simar" Rototiller is helped forward by its rotary, power-driven, elastic tyres. In this manner, the engine power is supplied directly to the soil tillage, instead of being partly wasted by being first converted into a translatory pull.

Some growers find it difficult to understand why so small and comparatively low powered a machine as the Rototiller will work to the same depth as a high-powered tractor. The explanation is that there is no backward resistance, instead, the machine is propelled forward by the rotary action of tilling unit, and thus possesses a much higher efficiency than the tractor. This means that there is no condition of ground which is too hard or too difficult for the Rototiller to tackle.

A feature that has contributed in no small way to their success is the fact that each working "tyne" is fitted to a special coil spring. One of the main objects of these springs is to absorb the shock of impact with the soil and any obstruction such as roots, stones, or stumps. Without these buffer springs the shock would be vibrated through the entire machine, eventually causing mechanical trouble. The construction of the tynes and springs, which have superseded the rigid blades, has been continually improved in the course of the last fifteen years, with the result that the risk of distortion or breakage from obstructions in the soil is negligible.

The tilling unit (or Miller, as it is termed) consists of what might be described as a cylindrical drum mounted parallel to the driving wheels and revolving in the same direction as the latter. This "Miller" takes its direct drive from the engine and is independent of the wheels in front. The drum consists of a shaft on which are mounted two sleeves, one

on either side of the central casing containing the driving gears. This central drive is of utmost importance as it eliminates "side-drag" which generally occurs in the case of a side drive. The sleeves carry a number of separately spring-mounted claws or tynes. Their action consists in "biting" the soil along the edge of a self-made trench equal in length to the width of the "Miller" track. The soil so displaced is thrown backwards and moulded by a board carried behind the machine. This board forms part of a hood completely enclosing the top and sides of the "Miller," ensuring the formation of a perfectly level tilth, and at the same time affording protection to the driver from soil or stones which may be thrown up by the tynes. When ground is prepared with a Rototiller, there is not a single footprint left on the tilled soil, due to the fact that the operator walks beside (and not behind) the machine.

Rototillage does not result in the formation of "hardpan," because the sharp pointed revolving tynes leave a broken bottom, in marked contrast to the smooth and compressed bottom left by other methods. This allows surplus water to drain away freely during wet spells and assists capillary action in time of drought. It also obviates the necessity for periodical sub-soiling.

The depth of tillage with a Rototiller can be adjusted at will within the limits of 1 to 12 inches. Tynes of different designs are available for various types of work and these can be interchanged quickly without the use of a single nut or bolt. The primary use for the normal Miller tynes, which are fitted as standard to the machine, is for deep tillage, but they are equally useful for shallow work.

Knife tynes are supplied for dealing with abnormally weedy ground. These tynes have a straight shaft and cutting edge. Their action consists in cutting the long fibres which are in consequence prevented from accumulating on the hook-shaped tynes, rendering them self-cleaning. Incidentally, these tynes have been effectively employed for pasture improvement.

Should a coarser tilth be desired than obtainable from the normal tynes, a further type is available, which is similar to the knife tyne, except that the shaft is bent at the end approximately at right angles.

The "Simar" Rototiller will be exhibited at the Royal Easter Show on Stand 47 in Claret-street (just behind the Wine Kiosk). All who are interested in rotary cultivation are invited by Motor Tractors Pty. Ltd., the Australasian distributors, to visit them and examine this modern cultivator.

EARLY WILLSON PLUMS.

Not Suitable for Export.

That the early Willson Plum is unsuitable for export is stated by the Australian Government Commissioner at Batavia. In his report to the Department of Commerce the Commissioner states 60 cases of Early Willson Plums arrived from Australia at Batavia early in December. The shipment was a complete failure, the Plums were too small, and not sweet enough. Plums deteriorated within 5 or 6 hours of being removed from cool storage.

Rotterdam (5/1/38).—Prices received for U.S.A. Pears were D'Anjou, fancy, 12/2 to 15/-; Apples, Wine-saps, extra fancy, 11/-.

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This Page for Fruit for Export or Sale on
The Adelaide Market.

Tasmanian News & Notes

Heavy Rainfall Causes Erosion — Unsatisfactory Shipping Programme
Sturmer Best for "Pie" Apple Pack — Nicotine Sprays Useful, But Too
Expensive — Grading Regulations Needed in N.S.W. to Improve the
Sydney Market.

(By Our Correspondent.)

THE weather experienced in Southern Tasmania continues to be abnormal. Two very heavy falls of rain have put us above the average for January and February, and in many cultivated areas severe loss of soil has resulted, especially in parts of the Derwent Valley.

Damage was also done in the Cygnet and Margate districts by a severe thunderstorm, one man at Port Cygnet being killed by lightning, while at Margate several orchards were severely injured by hail, which is unusual here at this time of year.

Owing to the moist conditions, "Irish Blight" has destroyed many Potato crops both north and south. Several brilliant displays of Southern Lights (Aurora Australis) have been visible this Summer, and they usually indicate abnormal weather conditions pretty accurately.

There has hardly been a fine week end since Saturday morning closing commenced in Hobart. The town seems very dead now on Saturday and many shopkeepers complain of loss of trade, especially the fruit shops. The fruit trade seems very sensitive. I understand the experiment is to be tried for six months, which will include most of the tourist season, including the Apple boats, so visitors will get a funny impression of Tasmania and its somnolent city.

Considerable concern is felt throughout Tasmania at the shipping programme provided by the shipowners to lift this State's oversea fruit exports this season.

The crop is much more mature than is usual at this time of year, and early space scarce. The Tamar Valley is particularly badly served in February and early March, much of the early fruit, such as Worcesters, having fallen off while waiting for the first boat.

Tamar Valley, which ships over 400,000, gets only 4 boats up to March 17, while Victoria, only 200 miles or so across the Straits and not shipping much more than double, has got a boat per day through March. Tasmania does not get a fair deal in this respect, and is at a serious disadvantage owing to the shipping programme. The programme for the southern end of the Island is not satisfactory either. The difficulty we have in getting our fruit away in its proper season is responsible for serious loss to the growers of Tasmania.

The mishap to the "Port Dunedin" and "Australia Star" no doubt made it difficult for the shipowners for a time this season, but the fact remains that our service is inadequate.

An interesting ceremony took place at Gordon on Friday, 18th inst., when a memorial tablet was unveiled by His Excellency the Governor, Sir Ernest Clarke, to commemorate the discovery of the channel by the French navigator, Bruari D'Entrecasteaux. The visiting French war boat participated in the ceremony.

The Royal Hobart Regatta is the topic of the day, and appears to have attracted a lot of competitors and visitors. Saturday's display was beautiful, the weather being almost perfect. The visiting warships from various countries caused a lot of interest, and the illuminations, searchlight display and fireworks were all well carried out and made a most effective display. Altogether it was a great success, and the organisers deserve great credit for the way it was all carried out.

The referendum to decide the fate of the State Fruit Board takes place on February 28, also a by-election to fill the vacancy caused by Mr. L. S. Taylor's resignation. There are three candidates.

To return to fruit matters. The Port Cygnet growers are progressing with their "Pie Apple" enterprise, and hope to make a start shortly.

They are also asking the drying factories for an increased price for Apples supplied for that purpose. Last year they only paid 1/- per 50 lbs., and in some instances less. The growers are asking 1/6 per 50 lbs. for drying and 2/- for S.T.P. for Pie Apple. The Sturmer appears to be the best variety for that purpose, as it has the flavor.

As both products are largely used within the Commonwealth, the price could be increased if the growers in the various States would co-operate, and not supply Apples for less—1/6 is little enough.

The Apricot growers had a worrying time this season, as the excessive rain cracked a lot of the fruit, rendering it unsuitable for making first-class pulp.

The first shipment of Apples for this season left by the "Stratheden" on Saturday, 19th; the fruit appeared to be of very good quality right through.

Canary Fly and Red Spider are a little troublesome in places this season, the nicotine sprays are effective, but the price is very high, in fact, almost prohibitive. Some years ago we could buy tobacco waste and make an infusion of tobacco which was effective and fairly cheap. I understand that the waste is now destroyed under some regulation, and nicotine sulphate is imported at about £2/10/- per gallon retail.

The Apple and Pear Council, at its last conference, passed a resolution asking the Council for Scientific and Industrial Research to experiment with regard to a cheaper yet effective spray, but so far I have not heard of anything having been done.

Nicotine is such a useful and safe

insecticide that its use should be encouraged.

With regard to Interstate Regulations, it was decided by the conference held in Sydney in December last to raise the minimum size of certain varieties now allowed down to 2-inch diameter to 2½ and 2½, and several cooking varieties to a minimum of 2½ inch.

I have not heard whether the N.S.W. Agricultural Department intends to act on the recommendation, if not, the Sydney market will be little better than last year.

No advertising campaign can persuade the public to buy large quantities of inferior fruit.

The Tasmanian shipping programme has had another setback, for by yesterday's paper a notice appeared saying that the "Tuscan Star" listed for February 26 will be delayed till March 24/2/38.

1, and as many growers had their fruit picked for her it is putting them to serious inconvenience and possibly loss.

These little delays are not so bad later in the season when we are on harder varieties and the temperature is lower, but at this time of year the fruit deteriorates rapidly. One of our serious problems in Tasmania is having fruit held over from various causes and shipped at a later date.

Many growers are shipping Cleos, from Beauty Point in the "Stirlingshire," February 26, also Worcesters and C.O.P. The quality of the Tamar Valley fruit seems particularly good this season, being well colored and up to size.

The varieties being shipped in February from Hobart are mostly Worcesters, Alf., and C.O.P. 24/2/38.

Tasmania

CROPS RESPOND TO GOOD GROWING CONDITIONS — PEST AND DISEASE CONTROL — CO-OPERATIVE PACKING SHEDS ADVOCATED.

THE MONTHLY REPORT to the Tasmanian Minister for Agriculture (Hon. R. Cosgrove, M.H.A.), by the Chief Horticulturist, Mr. P. H. Thomas, contains items of interest. The report is dated from Hobart on February 9, 1938.

Weather and Crops.

Though fairly high temperatures were recorded at times during January, the weather was cooler than is generally experienced at this time of year. Rainfall was well above average in most districts, and very similar to that occurring during the same period last year. The following records are taken from representative centres— Hobart, 365 points, compared with the average 184; Launceston, 312 compared with 178; and Franklin, 388 compared with 273. For the same period last year 338, 483, and 404 points were recorded respectively.

The exceptionally heavy rainfalls caused much erosion on the more hilly areas.

It has been found necessary with certain varieties to do a limited amount of summer pruning, so that reasonable colour may be obtained, and propping of trees is also underway. The early maturing of the crops

mentioned in the last notes is now apparent and good quality fruit should be available for the early boats.

Pests and Diseases.

In spite of the rather humid conditions, black spot is not so prevalent as would be expected, and where lime sulphur and colloidal sulphur were used periodically, little is in evidence. The Bagdad and South Huon areas will, however, lose a percentage of their crops from spot injury, should wet weather continue.

Red Spider, following a few years of minor infestations, has again become prevalent, and if it had not been for the good growing conditions already referred to, crops might have suffered. It is probable that more oil spray will be necessary next dormant season.

The second spraying for Canary Fly was conducted in early February in badly infested orchards. Many orchardists, however, had succeeded in reducing the numbers to negligible quantities by the November sprays.

It is evident that under certain conditions and with certain brands of nicotine sulphate, care in application during February spraying is necessary when used in combination with

SPECIAL NOTICE TO FRUITGROWERS

All Members
under
Fidelity Bond

In response to numerous requests from growers for information as to who are members of the

Wholesale Fruit Merchants' Association of Victoria

the following list is given. All are members of the above Association, and are registered firms carrying on business in the

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REGAN & KENNY (Successors to Wm. Sweeney). (33).

Office : 21 Wholesale Fruit Market,
 Queen Street, Melbourne. Phone F 4866.

Correspondence is invited by the Association.

TASMANIA—Continued from page 39

arsenate of lead, and one or two instances of leaf and fruit injury have come to notice, the exact cause for which has not yet been ascertained. Woolly aphis increased rapidly during the last two months, and it may be that parasites which emerged during the hot weather experienced in October and early November suffered from the nicotine applications for Canary Fly. Good control is now, however, being effected and the parasites are particularly active at the present time.

Codling Moth is again well under control after a serious outbreak earlier in the season. Picking and destroying affected fruits is strongly recommended as a final measure, and many growers are concentrating on this.

Brown Rot on stone fruits has taken a heavy toll this year, more particularly in the later ripening areas. Every precaution for the destruction of mummified diseased fruits hanging on the trees must be taken, and the collection and destruction of those

under the trees is recommended, especially where later ripening varieties are following.

Co-operative Packing Sheds.

Where expense and liabilities concerned with packing equipment are anticipated, the individual should seriously consider the advisability of joining a co-operative packing shed, or getting a number of other growers to come together in a movement of this nature. Co-operative or community sheds have been adopted in all large Apple producing centres of the world in favor of other systems and the voluntary formation of such organisations has an overwhelming weight of evidence in its favor under existing conditions of marketing.

SHOWS TO COME.

Amiens (Queensland) — March 5, 1938.
Diamond Creek (Vic.) — March 12.
Somerville (Vic.) — March 16.
N.S.W. Royal Show — April 9-23.

"FRUIT JUICES IN U.S.A."

OF recent years the most spectacular increases in fruit consumption in U.S.A. have been largely due to the growth in popularity of canned and bottled juices.

Mr. E. W. Gregory, of the Dewey and Almy organisation in Melbourne, says that no Australian who travels through America and who is interested in the fruit processing industry can fail to be impressed by the possibilities of this method of increasing consumption.

Even allowing for our comparatively small markets there are good prospects in Australia in these fields once the public is fully aware of the availability of first class products and a steady demand is assured. The most popular juices are Tomato, Pineapple, Grapefruit, Orange and blends of Orange and Grapefruit, sometimes with the addition of Lemon juice. These are by no means the whole range, as there is a growth in Cherry juice, Grape juice and Apple juice packing—even Papaw juice is produced in the South Eastern States.

Fruit Shop Hours

Extension of Saturday Half-Holiday.

SPeaking at the annual conference of the Victorian Central Citrus Association, the Secretary of the Retail Fruiterers' Association (Mr. Thompson) said citrus growers had not lost in any way because fruit shops now closed on Saturday afternoon during the Winter months. The public now bought their fruit and vegetables on Friday evening and Saturday morning.

From the retailers point of view the Saturday half-holiday was a boon and a petition would be presented for the extension of the Saturday half-holiday throughout the year.

In Australia we are already developing Tomato, Pineapple and Orange juice, but so far have not made much progress with Grapefruit juice, which in U.S.A., bids fair to outstrip the others and which offers no especial difficulties. Naturally, the development of such an industry in this country would be of great benefit to citrus growers.

Apple products such as Apple butter and Apple sauce, for which we have no counterpart here, absorb large quantities of Apples, but the popularisation of these products would probably prove more difficult than would that of fruit juices.

ARTIFICIAL MANURE SUBSIDY.

Applications Close on April 30.

A SUBSIDY at the rate of 10/- per ton is payable by the Commonwealth Government to primary producers in respect of artificial manure used during the twelve months ended June 30, 1937, in the production of primary products other than wheat. Payment is made in respect of complete ton or half ton lots only, other fractions of a ton being excluded.

Applications definitely close on April 30, 1938, by which date applications must be in the hands of the Secretary, Department of Commerce, at the following addresses:

Victoria: 419 Collins-street Melbourne.

New South Wales: Commonwealth Bank Buildings, Pitt-street, Sydney.
Queensland: Commonwealth Offices, Brisbane.

South Australia: 29 North-parade, Port Adelaide.

Western Australia: Customs House, Fremantle.

Tasmania: Customs House, Hobart.
F.C.T. and N.T.: No. 1 Secretariat, Canberra.

Under no circumstances will it be possible for applications received after April 30 to be accepted for payment.

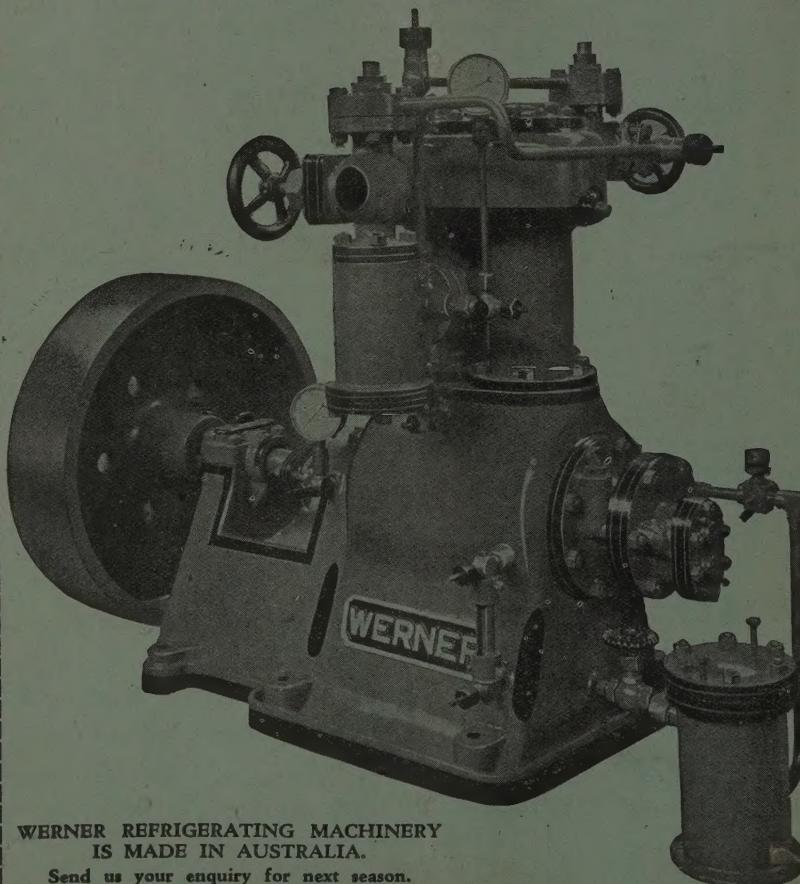
REVISION OF OTTAWA AGREEMENTS.

Four representatives of the fruit canning industry are going to London, to be present when the Ottawa Agreements are under review. These are Messrs. A. W. Fairley, Chairman of Directors, Shepparton Fruit Preserving Co., W. Young, Secretary, Australian Canning Fruit Growers' Association, W. G. J. Ewatt (N.S.W.), and W. J. Adams, Secretary, Canned Fruit Export Control Board.

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